THE PACIFIC AIRSHOW HUNTINGTON BEACH

Final Environmental Impact Report

Prepared for
City of Huntington Beach

August 2025

ESA



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Prepared for
City of Huntington Beach

August 2025

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CHAPTER 1
Introduction to Response to Comments

This Final Environmental Impact Report (Final EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and *CEQA Guidelines* (California Code of Regulations Section 15000 et seq.). The Final EIR incorporates, by reference, the Draft EIR (State Clearinghouse No. 2024020006) prepared by the City of Huntington Beach (City) for the Pacific Airshow (Airshow or Project), as it was originally published on February 20, 2025, and the following chapters, which include a list of persons, organizations, and public agencies commenting on the Draft EIR, comments received on the Draft EIR, responses to those comments, and revisions made to the Draft EIR either in response to a comment or as initiated by City staff.

1.1 CEQA Requirements

Before the City may approve the Project, it must certify that the Final EIR: a) has been completed in compliance with CEQA; b) was presented to the City Council who reviewed and considered it prior to approving the Project; and c) reflects the City's independent judgment and analysis (*CEQA Guidelines* Section 15090).

CEQA Guidelines Section 15132 specifies that the Final EIR shall consist of the following:

- The Draft EIR or a revision of that draft;
- Comments and recommendations received on the Draft EIR;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The response of the Lead Agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the Lead Agency.

This Final EIR for the Project includes the Draft EIR, as well as Chapter 1 through Chapter 5 of this Responses to Comments document:

- Chapter 1: Introduction to response to comments and a description of the CEQA process.
- Chapter 2: A list of persons, organizations, and public agencies commenting on the Draft EIR.
- Chapter 3: Written comment letters received on the Draft EIR and written responses to each comment identified in Chapter 2 that raise a significant environmental issue.
- Chapter 4: Corrections and additions made to the Draft EIR in response to comments received or initiated by the Lead Agency.
- Chapter 5: Mitigation Monitoring and Reporting Program.

1.2 CEQA Process

1.2.1 Public Participation Process

Notice of Preparation and Public Scoping

On February 1, 2024, in accordance with Section 15082 of the State CEQA Guidelines, the City published a Notice of Preparation (NOP) of the Draft EIR, and circulated it to the State Clearinghouse, resources agencies, and interested parties. The NOP requested comments on the scope of the Draft EIR. The comment period extended from February 1, 2024, through March 4, 2024, for a period of 33 days. The NOP provided a description of the project location, existing site conditions and surrounding land uses, land use and zoning designations, project background, project characteristics, historic and continued airshow activities and events, new airshow activities anticipated for 2024 through 2034, the airshow performer schedule, airshow performers, airport origin, airshow flight paths, and airshow performance duration, the show center area layout and event viewing, access, ingress/egress, road closures, and parking, airshow set up and site breakdown, event security and evacuation, utilities, and review and approvals.

On February 21, 2024, in accordance with CEQA Section 21083.9[1], the City held an in-person public scoping meeting to obtain public comments and suggestions from interested parties on the scope of the Draft EIR. On February 22, 2024, the City held a virtual scoping meeting for public agencies. The in-person public scoping meeting was held at the Huntington Beach City Hall, Lower Level Rooms B-7 and B-8, 2000 Main Street, Huntington Beach, CA 92648. The virtual scoping meeting for agencies was held via Zoom. At the scoping meetings, a brief presentation and overview of the Project was provided. After the presentation, oral and written comments on the scope of the environmental issues to be addressed in the Draft EIR were accepted.

Notice of Availability of the Draft EIR

The Notice of Availability (NOA) of the Draft EIR was posted on the Project Site and with the County Clerk in Orange County on February 20, 2025. Copies of the Draft EIR were made available to the public at the following locations:

- City of Huntington Beach, Planning Division, 2000 Main Street, Huntington Beach, CA 92648.
- City of Huntington Beach Central Library, 7111 Talbert Avenue, Huntington Beach, CA 92648.
- City of Huntington Beach Website:
  - https://www.huntingtonbeachca.gov/departments/community_development/major_projects.php
  - https://www.huntingtonbeachca.gov/departments/community_development/environmental_reports.php

The Draft EIR was circulated for a 47-day public review from February 20, 2025, through April 7, 2025, as required by Section 21091 of the Public Resources Code.

[1] CEQA Section 21083.9 requires that a lead agency call at least one scoping meeting for a project of statewide, regional, or areawide significance.

1.3 Evaluation and Response to Comments

CEQA Guidelines Section 15088 requires the City of Huntington Beach, as the Lead Agency, to respond to comments on significant environmental issues raised by parties that have reviewed the Draft EIR and prepare written responses to those comments. The written responses to commenting public agencies shall be provided at least ten (10) days prior to the certification of the Final EIR (*CEQA Guidelines* §15088(b)).

1.4 Final EIR Certification and Approval

Prior to considering the Project for approval, the City, as the Lead Agency, will review and consider the information presented in the Final EIR and will certify that the Final EIR:

(a) Has been completed in compliance with CEQA;

(b) Has been presented to the City Council as the decision-making body for the Lead Agency, which reviewed and considered it prior to approving the project; and

(c) Reflects the City's independent judgment and analysis.

Once the Final EIR is certified, the City Council may proceed to consider project approval (*CEQA Guidelines* §15090). Prior to approving the Project, the City must make written findings for all significant environmental effects and adopt statements of overriding considerations for each unmitigated significant environmental effect identified in the Final EIR in accordance with Sections 15091 and 15093 of the *CEQA Guidelines*, respectively.

1.5 Notice of Determination

Pursuant to Section 15094 of the *CEQA Guidelines*, the City will file a Notice of Determination (NOD) with the Office of Planning and Research and Orange County Clerk within five working days of project approval, if the Project is approved.

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CHAPTER 2
List of Commenters

The Draft Environmental Impact Report (Draft EIR) for the Pacific Airshow (Airshow or Project) was circulated for public review for 47 days (February 20, 2025, through April 7, 2025) in accordance with the requirements of *CEQA Guidelines* Section 15105(a). The City received 16 comment letters during the public review period, which are listed in **Table 2-1** and also included in their entirety within Chapter 3. The letters have been marked with brackets that delineate comments pertaining to environmental issues and the information and analysis contained in the Draft EIR. Responses to such comments are provided in Chapter 3.

TABLE 2-1
COMMENT LETTERS RECEIVED

Comment No.	Commenting Agency	Date of Comment
1	California Coastal Commission	April 7, 2025
2	California State Lands Commission	April 7, 2025
3	California Department of Fish and Wildlife	April 7, 2025
4	California Department of Transportation	March 27, 2025
5	City of Seal Beach	March 28, 2025
6	Bolsa Chica Conservancy	April 7, 2025
7	Amigos de Bolsa Chica	March 31, 2025
8	Coastal Corridor Alliance	April 7, 2025
9	Costa Mesa First	April 7, 2025
10	Fairview Park Alliance	March 4, 2024
11	Hamilton Biological	March 4, 2024
12	Carstens, Black & Minteer, LLP	April 7, 2025
13	Schelly Sustarsic	April 5, 2025
14	Susan Perrell	March 29, 2025
15	Kathryn Sinacori	March 12, 2025
16	City of Costa Mesa	April 7, 2025

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CHAPTER 3
Responses to Comments

3.1 Comments and Responses

This Chapter contains responses to comments on the Draft EIR that were received from government agencies, boards or commissions, organizations, and individuals, in writing. Consistent with Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside of the scope of CEQA review (i.e., where a comment does not raise a significant environmental issue, or where it expresses the subjective opinion of the commenter) will be forwarded for consideration to the decision-makers as part of the project approval process; these comments are answered with a general phrase, but no more detailed response is provided. All comments will be considered by the City of Huntington Beach, the Lead Agency, when making a decision on the Project.

Responses are provided as individual responses that respond to specific comments raised and as master responses that respond to broad issues where there were several public comments on the same issue. Master responses are presented first, followed by individual responses. Each comment letter, in numerical order, is included in its entirety, followed by the responses to the individually numbered comments.

In some instances, in response to the comment, the City has electively made additions or deletions to the text of the Draft EIR; additions are included as underlined text and deletions as ~~stricken text~~ (refer to Chapter 4). The revisions do not alter the conclusions in the Draft EIR. Therefore, the Draft EIR is not required to be recirculated as required by *CEQA Guidelines* Section 15088.5.

3.2 Master Responses

Master responses (Master Response A and Master Response B) are used to address similar comments that were raised in more than one letter and to provide information in a comprehensive, easily located discussion that clarifies and elaborates upon the analyses in the Draft EIR. The master responses are provided below:

Master Response A: Determination of Flight Paths

As stated in Chapter 2, *Project Description*, on pages 2-10 and 2-11 of the Draft EIR:

> *The Applicant will provide mandatory in-person or virtual daily formal briefings each day of the Airshow to all pilots about the location, nature, and sensitivity of the BCER*

and will request avoidance of overflights over this area. In addition, the Applicant will advise Southern California Terminal Radar Approach Control Facilities (TRACON) and the Joint Forces Training Base Los Alamitos Airfield Tower on the location, nature, and sensitivity of the BCER and will request avoidance of overflights in this area. The Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that overflights occur at 1,000 feet above ground level or above. Because pilots could be instructed by the to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. The Airshow airport origins, Airshow flight paths, and Airshow performance durations are subject to change each year for the Airshow.

Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams.

As required by FAA regulations, a pilot in command (PIC) is directly responsible for the safe operation of their aircraft and safety of each flight, including any/all passengers and crew. A PIC is the final authority of their aircraft's operation and may deviate from any regulation in 14 CFR, Part 91, Subpart A (General) and Subpart B (Flight Rules) as required to maintain safety of flight.

Many commenters have requested the avoidance of flights over the Bolsa Chica Ecological Reserve (BCER) and that any overflight of the BCER occur at an altitude of 1,000 feet above ground level (AGL) or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Master Response B: Previous Agency Concerns About the Airshow

Several commentors mentioned a video regarding the "airshow's past harm to wildlife." The City is not in possession of a video. However, Pacific Airshow mentioned a video received from Melissa Borde, Reserve Manager for the BCER, during the 2024 Airshow, requesting confirmation that an overflight was at or above 1,000 feet AGL. Pacific Airshow stated they consulted with the Thunderbirds, who confirmed the readings of their calibrated altimeters reflected flights at or above 1,000 feet AGL.

There have also been comments in letters submitted by the California State Lands Commission, the California Department of Fish and Wildlife, and Carstens, Black & Minteer indicating there have been significant adverse impacts on wildlife and habitat on the Bolsa Chica Wetlands during previous Airshows; however, specific evidence has not been provided as part of this Draft EIR process. Therefore, these comments are noted and included in the Project record. No response is required because the comment neither raises a specific, significant environmental issue nor addresses the contents of the Draft EIR.

Master Response C: Timing of the Airshow Relative to Bird Nesting Seasons

Section 3.2, *Biological Resources*, page 3.2-40, of the Draft EIR, indicates the nesting season for sensitive birds is March to September, which is a conservative assumption given that actual nesting seasons are dependent on each species and typically end before the Airshow or the pre-Airshow activities. The Airshow typically occurs during the first, full weekend of October, outside of the nesting season; however, there has been, and could be in the future, an occasion where the Airshow may need to occur during the last day or two of September, leading into the first days of October. Further, as stated in the Chapter 2, *Project Description*, of the Draft EIR, aircraft flight familiarization and flight practice flyovers begin as early as Monday of the week of the Airshow, which means there could be aircraft activity during the last week of September.

The "general" nesting season in southern California is loosely defined as February 1st though August 31st. More specifically, according to a document entitled *Western Snowy Plover Nesting at Bolsa Chica, Orange County, California 2022* (Peter Knapp, California Department of Fish and Wildlife, and Rachel Woodfield, Merkel & Associates[1]), the western snowy plover nesting season is from mid-March through mid-September, with the final nest completed by September 10 in 2022. The Belding's savannah sparrow nesting season is from April through July (Zeiner et al. 1988-1990[2]). According to the U.S. Fish and Wildlife Service, the nesting season for the California least tern is from mid-April to mid-September (USFWS 2025[3]). Even the earliest pre-Airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and western snowy plover, and well beyond the nesting season for the Belding's savannah sparrow.

Lastly, the light-footed Ridgway's rail nesting season is mid-March to the end of August,[4] which would also occur outside of pre-Airshow and Airshow activities.

As stated in the Chapter 2, *Project Description*, of the Draft EIR, and quoted in Response to Comment 2-4, pre-Airshow activity surveys and biological monitoring will be conducted each year to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. The biological monitors will assess the project area for nesting species and, if they occur, will identify specific measures to avoid potential impacts, as further described in Master Response D. Worth noting, the biological

1 Microsoft Word - 2022 Bolsa Chica WSP Report.doc, accessed on April 23, 2025.
2 BESS5yr.pdf, accessed on April 23, 2025.
3 California Least Tern (Sterna antillarum browni) | U.S. Fish & Wildlife Service, accessed on April 23, 2025.
4 Light-footed Ridgway's rail, accessed on April 23, 2025.

monitoring that occurred from 8:00 am to 4:30 pm during the first two days of the 2023 Airshow (September 29, 2023, and September 30, 2023) did not detect noise-related impacts to sensitive species during flyovers or the presence of nests. Further, the Applicant has voluntarily agreed that future Airshows and applicable Airshow activities (i.e., Airshow set up and site breakdown, aircraft flight familiarization and flight practice flyovers) will not begin prior to September 15 each Airshow year. There are currently routine helicopter flights conducted by the CDFW and the oil rig operators, as well as daily overflights from private and commercial aircraft, both of which also occur during the March to September nesting season, and there is no documented evidence of disturbance to nesting birds.

To ensure enforceability of the biological monitoring efforts, this Project Description Feature (PDF-1) will also be voluntarily included in the Project's Mitigation Monitoring and Reporting Program (MMRP). Because there are no identified and substantiated potentially significant impacts associated with the temporary Airshow activities on biological species, biological monitoring is not required as a mitigation measure.

In summary, the following will occur to ensure that potential impacts to nesting birds remain less than significant:

- Pre-airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and the western snowy plover and well beyond the end of the identified nesting season for the light-footed Ridgway's rail and general avian species.
- As further described in Master Response D, monitoring efforts will be conducted before and during the Airshow to survey for nests and provide measures to avoid potential impacts. The biological monitoring efforts are voluntarily included as part of the Project Description because there is no potentially significant environmental impact it would have mitigated; however, to ensure enforceability, biological monitoring will also be included in the MMRP.
- Daily briefings have and will continue to occur, although the outcome of those briefings cannot be guaranteed, as further described in Master Response A.

The following text changes will be made to Chapter 2, *Project Description*, pages 2-10 and 2-11 of the Draft EIR:

> To ensure enforceability of the biological monitoring efforts, this Project Description feature will be voluntarily included in the Project's Mitigation Monitoring and Reporting Program (MMRP). In summary, the following will occur to ensure that potential impacts to nesting birds remain less than significant:
>
> - Pre-airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and the western snowy plover and well beyond the end of the identified nesting season for the light-footed Ridgway's rail and general avian species.
> - Monitoring efforts will be conducted before and during the Airshow to survey for nests and provide measures to avoid potential impacts.

- Daily briefings have and will continue to occur, although the outcome of those briefings cannot be guaranteed.

Master Response D: Biological Monitoring

As stated in Chapter 2, *Project Description*, pages 2-10 and 2-11 of the Draft EIR, "Because pilots could be instructed by the ATC to fly over the BCER, pre-Airshow surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the pre-airshow activities, as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas." The following text changes will be made to Chapter 2, *Project Description*, pages 2-10 and 2-11 of the Draft EIR:

> Numerous daily flights by commercial and private aircraft currently fly over the BCER and helicopters regularly land at a helipad located within the BCER. However, the Project could increase the amount of air traffic that occurs over the BCER. The Applicant will provide mandatory in-person or virtual daily formal briefings each day of the Airshow to all participating pilots about the location, nature, and sensitivity of the BCER and will request avoidance of overflights and streamer drops over this area. In addition, the Applicant will advise Southern California Terminal Radar Approach Control Facilities (TRACON) and the Joint Forces Training Base Los Alamitos Airfield Tower on the location, nature, and sensitivity of the BCER and will request avoidance of overflights in this area. The Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that such overflights occur at 1,000 feet AGL or higher. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that the Applicant possesses no authority to restrict such activities. ~~Because pilots could be instructed by the to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas.~~ ~~The Airshow airport origins, Airshow flight paths, and Airshow performance durations are subject to change each year for the Airshow.~~
>
> Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams.
>
> As required by FAA regulations, a pilot in command (PIC) is directly responsible for the safe operation of their aircraft and safety of each flight, including any/all passengers and crew. A PIC is the final authority of their aircraft's operation and may deviate from any

regulation in 14 CFR, Part 91, Subpart A (General) and Subpart B (Flight Rules) as required to maintain safety of flight.

While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Because pilots could be instructed by the air traffic control (ATC) to fly over the BCER due to these factors above, preactivity surveys and biological monitoring will be conducted each year to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. Further, future Airshow and applicable Airshow activities (i.e., Airshow set up and site breakdown, aircraft flight familiarization and flight practice flyovers will not begin prior to September 15 each Airshow year. The specific monitoring efforts will include the following:

- A qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) will conduct a preactivity survey of the areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area. These surveys will occur one day before any pre-Airshow activities and continue through every day of pre-Airshow and Airshow activities to observe baseline avian behavior and the effects of the Airshow on bird behavior.
- The qualified biological monitor will be present in areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area during the Airshow to monitor bird activity and reactions during the event.
- If nests are found, the qualified biologist shall establish a 300-foot buffer for CEQA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area shall not be entered.
- Trash and debris in the vicinity of nest sites or other sensitive habitats shall be removed by or at the discretion of the qualified biologist.
- During the 2023 Airshow, no noticeable change in avian behavior was observed and no California least tern or western snowy plover were observed. If a noticeable change in behavior (i.e., flushing or flying off) by state and/or federally listed species (e.g., western snowy plover, California least tern, and/or Belding's savannah sparrow) is observed by the biological monitor resulting from flyovers during future

Airshows, the monitor will consult with the City and the Applicant to propose an increase in flight elevation, recognizing that the FAA, flight controllers, and the pilots ultimately determine flight elevations.

- Following the conclusion of the annual Airshow, the biological monitor will prepare a post-Airshow report to: (1) document observations, including reporting any relevant information to the CNDDB website and/or CDFW's Vegetation Classification and Mapping Program (although the focus of the monitoring efforts is on avian species); (2) identify measures that were taken, as needed, to avoid potential impacts to nesting or sensitive species; and (3) provide recommendations for future Airshows. The report will be made available to the public on the City's website.

Results of 2023 Biological Monitoring Efforts

Biological monitoring was conducted for the 2023 Pacific Airshow on September 29, 2023, and September 30, 2023, from 8:00 am to 4:30 pm each day. Monitoring was conducted at the areas within the study area (refer to Figures 3.2-1A to 3.2-1J of the Draft EIR) that have the potential to support sensitive biological resources, as well as the BCER, both parking areas around the beach area south of the Show Center Area (including the Magnolia Marsh habitat south of Magnolia Street), the areas known to support California least tern and snowy plover, as well as the Show Center Area that was not determined to support sensitive biological resources, but was assessed during monitoring to confirm bird activity (refer to Appendix D of the Draft EIR for monitoring results).

No California least tern or western snowy plover were observed. The state listed Belding's savannah sparrow was observed within the BCER along with the other birds of interest, with the Osprey south of the Show Center Area recorded foraging.

No observed birds, including the Belding's savannah sparrow, indicated disturbance during Airshow activities south of the Show Center Area or at the BCER, as they were observed sufficiently far from the main Airshow activities associated with the Show Center Area. In general, several flocks at the beach (near the Show Center Area) dispersed due to larger aircraft flying overhead. Shorebird foraging seemed to be influenced by larger crowds of people attracted to the beach and potentially to aircraft as they were found south of the Show Center Area at the Santa Ana River outflow during the Airshow. ESA biologists observed them foraging earlier in the day in sections of the beach before the Airshow and large crowds appeared, but these areas were later void of shorebirds once crowds appeared.

In summary, foraging flocks and birds observed appeared relatively undisturbed at BCER North and South (either unaffected or resumed disrupted foraging behavior shortly after aircraft moved away from the area). No streamers or other debris were observed in the Reserve or other habitat areas during monitoring.

3.3 Individual Responses

The following section contains the written comments received on the Draft EIR followed by the responses to those comments. They are presented with consecutive numbering (e.g., Letter 1, Letter 2, Letter 3, etc.).

Consistent with Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside the scope of CEQA review will be forwarded for consideration to the decision-makers as part of the Project approval process. All comments will be considered by the Lead Agency when making a decision on the Project.

3.4 Response to Written Comments

The following are written comment letters received, followed by their responses.

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY GAVIN NEWSOM, *Governor*

CALIFORNIA COASTAL COMMISSION
South Coast Area Office
301 E Ocean Blvd, Suite 300
Long Beach, CA 90802
(562) 590-5071

April 7, 2025

Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach Department of Community Development

SENT VIA ELECTRONIC MAIL

RE: Pacific Airshow Huntington Beach Project, City of Huntington Beach
Coastal Commission Staff Comments on Draft Environmental Review

Connor Hyland,

Thank you for the invitation to comment on the Draft Environmental Impact Report (EIR) for the Pacific Airshow Huntington Beach Project (project) located along the public beach along Pacific Coast Highway between 7th Street and Beach Boulevard in Huntington Beach. As described in the EIR, portions of the project would be located within the California Coastal Commission's retained permitting jurisdiction for coastal development permits and subject to the requirements of the California Coastal Act.

As described in the EIR, the annual project would enclose approximately one mile of public beach for roughly one week, within which a privately ticketed airshow event space is held for three days. The privately ticket airshow event space also includes installing temporary infrastructure for private viewing areas, concessions, food and merchandise stalls, restrooms, a temporary runway, live concert staging, electronics such as flight simulators, BMX and skateboard competition facilities, a wave pool, and pyrotechnics. While the event grounds are located along the waterfront of Huntington Beach, Huntington City Beach parking lots, Huntington City Beach RV Campground, and the Huntington Beach Pier, a key feature of the event is civilian and military planes and jets performing flyovers and acrobatic displays over the three days of the event and during the practice week leading up to it, centered around the show center area but encompassing multiple square miles of airspace over coastal habitat and resources. The following comments are related to the proposed project's consistency with the Coastal Act. 1-1

Biological Resources. Coastal Act Section 30240 states that "environmentally sensitive areas shall be protected against any significant disruption of habitat values," and that "development in areas adjacent to environmentally sensitive habitat areas…shall be sited and designed to prevent impacts which would significantly degrade those areas." Planes and jets can have immense and far-reaching noise impacts at ground level, particularly when executing high speed and low altitude maneuvers typical at airshows. Military aircraft, such as F-series jets identified by the EIR as possibly participating regularly in the proposed airshows, typically produce noise levels well in excess of 100 dB at ground level in their vicinity. There are multiple nature preserves in the surrounding area of the airshow containing sensitive habitat that could suffer significant adverse impacts to species present, including endangered nesting birds, by aircraft flying over or near their boundaries. Bolsa Chica Ecological Reserve, Seal Beach National Wildlife Refuge, Upper Newport Bay Nature Preserve, Brookhurst Marsh, and Los Cerritos Wetlands are just some of the sensitive habitat areas located in close proximity to the airshow center and potential flight paths. 1-2

In its study of potential biological impacts, the draft EIR limited its biological study area to only a small portion of the Bolsa Chica Ecological Reserve and completely excluded other nearby sensitive habitat areas from its analysis. Flight paths for aircraft participating in the airshow can be expected to extend well beyond the approach corridors outlined in the EIR, and as such, impacts should be

analyzed across the potential operating airspace of participating aircraft, not simply flight paths to the associated airfields. It is recommended that the whole of any sensitive habitat areas such as the Bolsa Chica Ecological Reserve and others that could be flown over by aircraft should be analyzed for their coastal biological resources and risk of impact. Similarly, alternative flight paths to and from the associated airfields that completely avoid sensitive habitat areas, as well as alternatives to the Airshow Performance Area that minimize risk of flight path intersection with habitat areas should be considered. 1-2 (cont.)

Because flight paths can change and deviate from expected areas without notice during aircraft maneuvering despite guidance, mitigation measures for habitat monitoring for the event should be expanded to include the whole of nearby preserves and also be conducted during all practice and performance days. Additionally, the project proponent should clarify how the information from habitat monitoring surveys will be used to inform operational changes to mitigate any observed impacts. It is recommended that mitigation planning engage with State and local agencies to ensure the efficacy of these plans in the protection of biological resources. 1-3

Water Quality. Section 30230 of the Coastal Act requires that marine resources be protected, while Section 30231 requires that water quality of coastal waters be protected by minimizing waste water and runoff pollution. With the event including the sale of food and drink and the potential placement of temporary restrooms, motorized vehicles, aircraft, and wave pools on the beach along coastal waters, all of which have potential pollution impacts on ocean waters, the risks to water quality from these activities and any unexpected spills should be analyzed. Information should be provided on the materials being used and the equipment required for the construction of the temporary infrastructure referenced in the EIR, such as the temporary runway, wave pools, concert staging, flight simulators, and any concessions. Potential impacts should be fully considered and minimized to ensure the protection of water quality and marine resources. It is recommended that water quality best management practices (BMPs) be proposed as part of this mitigation strategy. 1-4

Furthermore, the EIR identifies fuel dumps into ocean waters as a possibility from participating aircraft without indicating any plans for how a spill event would be responded to and managed. Section 20232 of the Coastal Act requires that spillage during the transportation of petroleum products be protected against and that procedures for the effective containment and cleanup facilities in the case of a spill be provided in development plans. It is recommended that response plans be prepared in the case of an aircraft fuel dump to protect marine resources and water quality. 1-5

Public Access. Section 30211 of the Coastal Act ensures that development along the coast does not interfere with the public's constitutionally protected right of access to the sea, including dry sand and rocky coastal beaches, acquired through use or legislative authorization. The EIR should also be clarified to explain how vertical and lateral public access to the shoreline will be maintained during the event, and set-up and take-down of all temporary infrastructure. Further, more information should be provided on how public parking access is being preserved, with specific mention of event related facilities that will be located in public parking lots. 1-6

The EIR also does not account for potential impacts from the music festival and after party taking place during the days of the airshow, despite it using the same enclosed area as the airshow, being closed to the public, and being characterized as the "Official After Party of the Pacific Airshow." The potential coastal resource impacts of this portion of the event should be analyzed and mitigated, or alternatives should be proposed that do not restrict public access after the hours of the event. In the case that music festival is held, consideration should be given to offering low cost or free tickets to increase accessibility for a broad portion of the public. 1-7

Please note that the comments provided herein are preliminary in nature. Coastal Commission staff requests notification of any future activity associated with this project to provide more specific comments as the project develops. Thank you for the opportunity to comment on the Draft EIR. Please contact me at seth.villanueva@coastal.ca.gov with any questions. 1-8

Sincerely,



Seth Villanueva
Coastal Program Analyst

Comment Letter 1: California Coastal Commission

Response to Comment 1-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 1-2

As noted in Section 3.2, *Biological Resources*, Section 3.2.1 Environmental Setting, pages 3.2-1 and 3.2-2, the proposed flight path and a 500-foot buffer was examined, which includes a small piece of Seal Beach National Wildlife Refuge and Bolsa Chica Ecological Reserve (BCER) and half of the Brookhurst Marsh. This biological study area (BSA) does not overlap sensitive ecological areas including Upper Newport Bay Nature Preserve and Los Cerritos Wetlands. Therefore, they were not analyzed as part of this Project. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 1-3

As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Because pilots could be instructed by the ATC to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project for one day prior to the start of any pre-Airshow activities (i.e., aircraft flight familiarization and flight practice flyovers) and for every day of pre-airshow activities and Airshow activities to determine whether Airshow

activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas.

Impacts to the BCER are also discussed in Section 3.2, *Biological Resources*, under 3.2.5.1 Special-Status Species, pages 3.2-39 through 3.2-41, and was determined to not significantly contribute to impacts to special-status birds, including nesting areas, due to the existing conditions of numerous daily flights by commercial and private aircraft and helicopter activity from which flights regularly operate over the BCER.

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 1-4

The Airshow proposes no new permanent development. As described in Appendix B, Initial Study, pages 3-36 and 3-37, there would be no potential for construction, grading, or ground disturbance and thus the Airshow does not need to comply with the water quality requirements of the National Pollutant Discharge Elimination System (NPDES) for preparation of a Storm Water Pollution Prevention Plan (SWPPP) or a Water Quality Management Plan (WQMP). The Airshow would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Since most of the Project Site consists of flat sandy beaches, there is no potential for surface runoff. Further, where paved areas exist (e.g., parking lots and bicycle and walking trails) within the Project Site, adequate City storm drain systems currently exist.

According to Appendix B, *Initial Study*, page 3-56, restrooms available for the Airshow would consist of the existing restrooms, over one-hundred (100) portable and Americans with Disability Act (ADA) bathrooms, and several restroom trailers located throughout the venue. Each of the single portable restrooms would sit in a containment tray on top of plywood (or other suitable flooring) and would not be within 50 feet of an existing storm drain. Wastewater generated from the Airshow is hauled off by the Applicant's vendors (i.e., portable bathrooms).

According to Appendix B, *Initial Study*, page 3-33, all heavy equipment would be refueled in the parking lots. A drip pan would be placed below the equipment to catch potential stray fuel leakage and would be stored at least four inches AGL. A spill kit would be available if needed during refueling. Four-wheel drive fuel carts would service the generators on the beach with each generator placed on plywood for stabilization. The fuel carts would be equipped with a spill kit and drip pan for fueling of generators. Spill kits would be available throughout the Project Site. The Applicant would ensure the spill kits contain adequate amount of absorbent and suitable containment materials at all times during the Airshow. Vehicles and equipment that cannot be fixed or repaired immediately onsite would be removed from the area. A fuel tank would be placed in the parking lot.

Consistent with the City's franchise agreement, the Applicant would contract and coordinate refuse needs with the City's waste management provider, Republic Services. Republic Services

would provide cardboard general waste and recycling bins with lids to be located throughout the Show Center Area including the reserved parking lot areas and would place dumpster bins in accordance with expected attendance. Dedicated food waste bins would be placed in the hospitality areas throughout the venue. The Applicant would be responsible to replace all full trash can liners throughout the venue and to place the trash from the bins into the dumpsters to then be removed by Republic Services following the conclusion of the Airshow. The Applicant would encourage all food vendors to avoid plastics (straws, cups, lids) and recommend use of paper straws or straw less lids.

Response to Comment 1-5

According to Section 3.2, *Biological Resources*, pages 3.2-44 and 3.2-45 of the Draft EIR, there is the potential for low probability, potentially high impact event of an emergency fuel dump from aircraft in the air for safety reasons. Typically, most of the fuel that is dumped turns into vapor within a few minutes. If jettisoned at a high enough altitude in above freezing temperature, evaporation rate calculations show that over 90 percent will evaporate before reaching the ground. The fuel vapors typically rapidly dissipate and diffuse in the atmosphere where they could be subject to photooxidation and contribute to regional pollution including the formation of smog. A typical F/A-18 super hornet has a fuel capacity of approximately 2,000 gallons and might require dumping approximately half of that for emergency reasons, which would result in a hypothetical fuel dump of approximately 1,000 gallons of which 100 gallons may reach the nearshore/offshore area of the Huntington Beach area. This would be considered a minor discharge and potentially result in a light surface sheen that would quickly evaporate. It is important to note that these same risks exist with all aviation overflights, not just those from the Airshow, including daily commercial flights within the Project area. In the very unlikely event that a fuel dump should occur, the Applicant will work closely with the U.S. Coast Guard to coordinate any potential response, clean up, and messaging efforts.

Response to Comment 1-6

To accurately address public access during the Airshow and multi-day music festival, the following text changes will be made to Chapter 2, *Project Description*, Section 2.6.6, Access, Ingress/Egress, Road Closures, and Parking, Pages 2-13 and 2-14 of the Draft EIR:

> 2.6.6 Vehicular Access, Ingress/Egress, Road Closures, ~~and~~ Parking, and Public Access
>
> Patrons arriving by vehicle are permitted to park within the Huntington Beach public parking areas, where the Applicant coordinates with the City to reserve parking spaces dedicated to Airshow attendees. Access to the public parking lots adjacent to the Show Center Area are located along Pacific Coast Highway at the intersection of 6th Street, 1st Street, Huntington Street, Beach Boulevard, and a right-in-right out driveway mid-block between Main Street and 1st Street. Additional public parking southeast of the Show Center Area can be accessed at Newland Street, Magnolia Street, and Brookhurst Street. On-street parking in the general vicinity is allowed except where the temporary restrictions are implemented along Pacific Coast Highway, along with other streets with temporary closures as described above. The Applicant encourages the use of ride share,

provides ride share pick up/drop off locations, and provides bicycle valet services as part of the Airshow. ~~The Applicant and City could implement future event shuttle programs that would allow attendees to park at designated public locations and ride a free shuttle to the Show Center Area.~~ It is anticipated the City would close the parking entrance located at Huntington Street and Pacific Coast Highway for the Airshow's exclusive use during event staging of equipment, set up, production on event days, and event breakdown. The Airshow typically utilizes approximately 500 parking spaces for production and staging of equipment beginning with the first day of setup and the last day of tear down. The 500 parking spaces represents approximately 8 percent of the total available public access parking within Huntington City Beach and Huntington State Beach, including approximately 6,200 parking spaces in the Project vicinity. All other details regarding parking will be governed by a future agreement between the City and the Applicant. The RV camping lot at this location would be reserved for curation and sale of the Airshow's RV Camping Experience with camping check-in offered on the day prior to the start of the Airshow check-out the Monday following the Airshow. ~~The Airshow would also have 15 RV camping spaces reserved for production use and set up beginning prior to the start of the Airshow up to the Friday following the end of the Airshow.~~ All other details regarding parking will be governed by a future agreement between the City and the Applicant.

During the Airshow and the multi-day music festival, and only during event operations and music festival hours, public access would be limited to ticketed holders within the defined areas through the use of fencing and Airshow personnel and security. To ensure public safety during the event's set up and tear down phases, certain beach areas will have restricted access due to high-risk activities, including the use of heavy machinery, sharp objects, trip hazards, and other potential dangers to the public. Some areas, particularly those near the flight high-risk zones, may be closed off for public safety. These zones are typically marked, and access is restricted to ensure that no pedestrians enter dangerous areas during the Airshow performances and nighttime flyovers during the multi-day music festival. However, public beach areas located beyond the Show Center Area will be open to unrestricted public access for both spectators and beachgoers, as well as boaters within the Pacific Ocean located beyond the Airshow Performance Area. While the Airshow is hosted over Huntington City Beach, the event does not close off the entire beach. In fact, only approximately 8 percent of the available sandy beach space along the entire Huntington Beach coastline is occupied by the ticketed areas and all other areas of the sandy beach, including most all other public spaces such as the bicycle and walking trails along Pacific Coast Highway, sidewalks, and commercial/restaurants uses in the immediate vicinity, are free-to-view spaces.

Response to Comment 1-7

The Draft EIR addresses potential impacts from the potential music festival. The multi-day music festival would occur following the conclusion of the Airshow up to 11:00 PM over three (3) days over the weekend directed towards the ocean with separately sold tickets. Nighttime flyovers or displays by designated aircraft including parachute jumps onto the beach within the Performance

Area would be relatively quick in duration, even if multiple flyovers occurred, during the evening hours and potentially simultaneously with the music or between music acts.

The multi-day music festival would be located generally within the northernmost portion of the Show Center Area within Concert Area #1 (Area A) or alternatively the southernmost portion of the Show Center Area within Concert Area #2/Additional Seating/Activations Area (Area E). During the multi-day music festival, and only during music festival hours, public access would be limited to ticketed holders within the defined areas through the use of fencing and Airshow personnel and security. To ensure public safety, some areas, particularly those near the flight high-risk zones and parachute jump landing areas, may be closed off for public safety. These zones are typically marked, and access is restricted to ensure that no pedestrians enter dangerous areas during the nighttime flyovers or displays. However, public beach areas located beyond the Show Center Area will be open to unrestricted public access for both spectators and beachgoers, as well as boaters within the Pacific Ocean located beyond the Airshow Performance Area. While the Airshow is hosted over Huntington City Beach, the multi-day music festival area (Area A or Area E) does not close off the entire beach. All other areas of the sandy beach, including substantially all of the other public spaces, are free to view spaces.

Similar to the Airshow, the Applicant will consider providing free general admission tickets during each night of the music festival to the general public primarily to (a) students, (b) underserved youth and (c) their respective caregivers or guardians. A report of how the tickets were distributed shall be made available within 30 days post event upon written request from the California Coastal Commission.

Response to Comment 1-8

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

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April 7, 2025

File Ref: SCH #2024020006

Connor Hyland
Senior Deputy Attorney
City of Huntington Beach, Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

*VIA ELECTRONIC MAIL ONLY (*connor.hyland@surfcity-hb.org)

Subject: Draft Environmental Impact Report for the Pacific Airshow Huntington Beach, Orange County

Dear Connor Hyland:

The California State Lands Commission (Commission) staff has reviewed the Draft Environmental Impact Report (EIR) for the Pacific Airshow Huntington Beach (Project), which is being prepared by the City of Huntington Beach (hereinafter referred to as "the City"). The City is the public agency that has prepared the Draft EIR to inform decision-makers and the general public of the potential environmental impacts resulting from the Project, and is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign lands and their accompanying Public Trust resources or uses. Additionally, because the Project involves activity on State sovereign land under the Commission's jurisdiction, the Commission will act as a responsible agency. 2-1

<u>Commission Jurisdiction and Public Trust Lands</u>

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and 2-2

submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court.

A review of the Project described in the Draft EIR indicates that certain components of the Project clearly require Commission authorization, and that other components of the Project may require Commission authorization. The proposed Project includes an Airshow Performance Area which is to be situated on the Pacific Ocean with an east-west length of approximately 3,000 feet and a north-south length of approximately 12,000 feet. This area would be demarcated by 16 large white buoys installed in the Pacific Ocean waterward of the mean high tide line (MHTL), which in this location is ungranted sovereign lands managed by the Commission. Placement of the proposed buoys will require Commission authorization, generally in the form of a lease.

2-2 (cont.)

The proposed Project also includes a helicopter and aircraft landing/runway display on a temporary landing surface to be generally located within an open area directly in front of the Main Hospitality Area during the hours of the airshow. Based on the current Project information, the construction and/or use of the proposed runway may encroach waterward of the MHTL and onto sovereign land subject to the Commission's leasing jurisdiction, and, if so, would require Commission authorization.

Additionally, Commission Lease 6616, a General Lease – Public Agency Use, was issued to the City for the operation and maintenance of an existing municipal pier (Huntington Beach Pier or Pier) and related concessions for a term of 25 years, beginning June 21, 2018. The City's lease acknowledges that the Lease Premises, including the Pier, are subject to the Public Trust and are available to members of the public. Staff is aware that the proposed Project will utilize the Pier for purchasable seating, umbrellas, cocktail tables, and bars (page 2-13, 2.6.5 *Show Center Layout and Viewing*). The Draft EIR states that all Pier seating would be landward of the MHTL. However, should any Project component or activity on the Pier encroach waterward of the MHTL, Commission authorization will be needed in the form of either an amendment to the City's lease, or issuance of a new lease to the City or the event operator. Furthermore, any

other use of the Pier waterward of the MHTL, such as the proposed pyrotechnic shows described in the Draft EIR, may require Commission authorization; at the very least, these proposed activities will require submission of a detailed proposal to Commission staff for review. Finally, should the Project's use of the Pier impact or prohibit public access to the areas of the Pier waterward of the MHTL, then this would violate the City's lease and the common law Public Trust Doctrine.

It must also be noted that the Commission owns approximately 1,200 acres of sovereign lands in the Bolsa Chica Ecological Reserve (BCER) located within the Project's Temporary Flight Restriction (TFR) Area. The Commission leases these lands to the California Department of Fish and Wildlife (CDFW) for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica steering committee, provides overall management oversight of the portions of the BCER comprising the Bolsa Chica Lowlands Restoration Project.

2-2 (cont.)

Project Objectives

The City provides an extensive list of preliminary Project objectives (page 2-6) and states that the Pacific Airshow Huntington Beach event will achieve the City's objectives and need. Those objectives related to Commission jurisdiction and Public Trust resources include, but are not limited to: providing a gathering place for locals and visitors to enjoy civilian and military aircraft flybys, aerial acrobatics and festivals, promoting coastal access, and promoting awareness and use of the Pier and beaches.

2-3

In addition, the Draft EIR claims that the Project will, "Provide an event that reduces potential impacts to the surrounding sensitive habitat including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover" but offers no analysis that adequately supports this claim. The Commission and CDFW have provided the City evidence from past airshow events that the Project has impacted the surrounding sensitive habitat areas, including the BCER. Staff requests that the City include all information the City has regarding documented and potential impacts and the specific ways that the event reduces potential impacts to sensitive habitat.

2-4

Project Description

From the Project Description, Commission staff understands that the Project would include the following components that have potential to affect State sovereign land:

2-5

- Future airshows: Past airshows have taken place over a 3-day period with 2 or more practice flyover days. Future airshows discussed in the Draft EIR may be extended to 5 event days plus practice flyover days (page 2-7, *Project Characteristics*) and last from as early as 9:00 AM to as late as 11:00 PM.
- Helicopter and aircraft landing/runway display: A temporary runway would be constructed of stadium flooring on the beach in front of the Main Hospitality Area.
- Pyrotechnic Daily and Nightly Shows: Both daily and nightly shows may be discharged by aircraft, the Huntington Beach Pier, or an ocean barge. Nightly pyrotechnic shows would conclude by 11:00 PM.
- Beach Camping: Stadium flooring would be installed on the beach in Area C (page 2-9, *Future Airshow Activities*) to accommodate parking for recreational vehicles to camp on the beach, generally between Thursday and Monday morning following the event.
- Airshow Flight Paths: The Airshow's TFR area includes sensitive habitats, including BCER.

2-5 (cont.)

The Draft EIR identifies (page 4-10) Alternative 2: 2023 Airshow Alternative as the Environmentally Superior Alternative, as the No Project Alternative does not fulfill any Project objectives. Alternative 2 considers a 3-day event, with none of the new airshow activities identified in Section 2.6, *Project Characteristics*, which include a music festival, drone displays, pyrotechnic shows, aircraft/runway display, etc.

Environmental Review

As explained in the following comments, the EIR requires revision to comply with CEQA and to support a future lease approval by the Commission. Commission staff requests that the City consider the following comments on the Project's EIR to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the EIR when considering a future lease application or other approval for the Project. In addition, Commission staff strongly recommends that the City recirculate the EIR once the document has been updated with more information on the Project site and activities, associated impacts, and mitigation measures to ensure meaningful responsible agency input and public review.

2-6

In the absence of an updated EIR, Commission staff may need to undertake subsequent environmental review as part of future lease application processing or to support a future Commission action. Staff have attached the comment letter submitted on March 4, 2024, during the Notice of Preparation comment period (Attachment 1) and will refer to it throughout this section.

General Comments

1. Project Description: Staff comments previously provided (Comments 1 and 2, page 5 of Attachment 1) still generally apply to the Draft EIR. While the Draft EIR states that all project activities would take place "landward of the State Lands Commission MHTL," several components would be present below the MHTL, such as pyrotechnic shows that would be launched from the Huntington Beach Pier or from an ocean barge as well as the marker buoys required to set the perimeter of the aerobatic box/Airshow Performance Area in the Pacific Ocean. The installation of these buoys, in particular, would require a lease from the Commission and has no description or impact analysis in the Draft EIR, which may hinder the Commission's ability to rely solely upon the EIR when considering a lease. Staff suggests that the Project area boundary be revised to include all Airshow activities, including those falling below the MHTL. In addition, the Draft EIR lists some project activities in Section 2.6, *Project Characteristics*, (e.g., use of an ocean barge, beach camping, drone shows, helicopter and aircraft landing/runway display etc.) but does not discuss or analyze them further. All activities for the Project need to be analyzed in the EIR and should be included on relevant figures to determine if Commission approval would be required. If these activities are not analyzed in the EIR, then the Project Description must be revised to remove them from the proposed Project/event. 2-7

   The Final EIR must also confirm specific timing for future airshows. The airshow event dates should be included in the Project Description, where page 2-6 already states that historic airshow events occur "during the fall season, typically towards the end of September/beginning of October." If the EIR provides impact significance determinations that are predicated on specific scheduling for the event (e.g., the Biological Resources Technical Report (BRTR) conclusion of a less-than-significant impact to nesting birds because the airshow would be scheduled outside of the April-September breeding season), then the Project must be designed and described to include those restrictions. Alternatively, the Project Description could clarify that the event may happen at any point during the year, but the EIR must then revise its analysis to address new, potential impacts and provide feasible mitigation. 2-8

2. Project Feature - Biological Monitors: The Draft EIR discusses the use of biological monitors in Section 2.6.4, *Airport Origin, Airshow Flight Paths, and Airshow Performance Duration*, which states, "Because pilots could be instructed by the Federal Aviation Administration (FAA) to fly over BCER, pre-activity surveys and biological monitoring will be conducted each year as part of the Project…to determine whether Airshow activity is impacting bird behavior and to ensure that no airshow-related debris drifts into sensitive ecological areas." The biological monitors should therefore be included in the Project Description and identified as a project feature. The biological 2-9

monitor's role should be comprehensively defined to identify how many biological monitors will be required by the Project, where they will be stationed, what the biological monitor is present to observe, and what responses to impacts they are designated to carry out. For example, Section 3.2.5.1, *Special-Status Species* (page 3.2-40), notes that during a single past airshow event a streamer drifted into the Biological Study Area (BSA) and was removed within 15 minutes by the City's fire department. Staff recommends that the Project Description describe both the biological monitor's purpose, to "…ensure that no airshow-related debris drifts into sensitive ecological areas," and their required response (e.g., the monitor must promptly report fallen debris in the BSA and coordinate with the City of Huntington Beach Fire Department and CDFW for swift removal). 2-9 (cont.)

3. Public Agency Approvals: Staff notes that the Draft EIR omits the Commission from the list of public agencies with approval authority over the Project. In the Final EIR's Review and Approvals section, please include: 1) the Commission's Responsible agency review of the Final EIR and adoption of an independent Mitigation Monitoring Program, and 2) Approval of a State Lands Lease(s) and/or Lease Amendment. In the Final EIR's list (page 2-15) of public agencies whose approval is required, please include the Commission as a CEQA Responsible Agency. 2-10

Biological Resources

4. Impacts to BCER Special Status Species: A portion of the BCER was included in the Draft EIR's BSA and accompanying BRTR (Appendix D). However, while the BSA and BRTR include flight paths to and from the Training Base at Los Alamitos and John Wayne Airport as part of the project description, neither one includes "turn around" flight paths for jets within the Project's TFR Area, and no surveys were conducted for those "turn around" flight paths. These "turn arounds" have been observed occurring directly over BCER during past airshows, with jets observed flying below 500 feet in elevation. The CDFW on-site management staff at BCER have documented these flights by both photographic and video evidence for the airshows in 2021, 2022, 2023, and 2024. Documentation of these flights in prior years is recorded in emails. Video evidence has been sent to the City of Huntington Beach by Commission staff. CDFW staff shared the video evidence with local non-governmental organizations, FAA, Commission staff, Code Four, California Coastal Commission, United States Fish and Wildlife Service, and CBS news. The Draft EIR's analysis of environmental impacts to BCER is therefore incomplete, as the BRTR lacks critical data both to assess impacts and project effects from the jet "turn arounds" and to consider potential mitigation measures. 2-11

The Draft EIR should also evaluate noise and vibration impacts on special status species from potential aircraft fly-overs within and outside of the project area designated within the EIR, including BCER. Mitigation measures could include species-specific activity windows established in coordination with CDFW, USFWS, and the National Marine Fisheries Service. Staff recommends early consultation with these agencies to minimize Project impacts on sensitive species. 2-12

In addition, trash and debris created during the event, including streamers used in association with parachute performances, can pose a risk to wildlife through potential exposure, ingestion, and/or entanglement. Trash and debris can also lead to degradation of habitat. Staff request that the EIR should describe avoidance and mitigation measures, including best management practices, for the proper containment of trash and debris from the event to prevent these hazards from overflowing to the surrounding beach, water, and greater coastal area, including BCER. 2-13

5. Mitigation: Section 3.3.5.1, *Wildlife Hazards Analysis*, discusses the potential safety hazard posed from wildlife strikes, which could occur in the airspace over Commission jurisdiction and indirectly affect biological resources, sovereign lands, and/or the public utilizing those lands. On page 3.3-12, the "Significance before Mitigation" identifies the impact as "Potentially Significant." However, even though the Draft EIR determines that the resulting level of significance is less than significant with mitigation, neither Mitigation Measure (MM) HAZ-1 nor MM HAZ-2 reduce the severity of this impact. MM HAZ-1 requires a pre-airshow site visit and subsequent wildlife hazard memorandum, at an undetermined date, to recommend wildlife hazard reductions and to potentially include a long-term management strategy. MM HAZ-2 requires a biological monitor to observe event performances and document bird activity during aircraft flyovers and take-off and landing within the Show Center Area, later using this information to inform the wildlife hazard memorandum. Both measures allow the proposed Project's activities to occur, for an undetermined period of time, without addressing the potentially significant impact through alteration of activities or any compensatory mitigation. As such, MM HAZ-1 and MM HAZ-2 are not adequate pursuant to CEQA Guidelines section 15126.4(a)(1)(B), as they defer potential impact reduction to some future time and do not provide specific performance standards for future mitigation actions as well as the types of actions that could feasibly achieve that performance standard. If the Final EIR does not revise MM HAZ-1 and MM HAZ-2 to fulfill these criteria, then the impact determination must be changed to Significant and Unavoidable. 2-14

Biological monitoring as mitigation is also potentially discussed in Section 3.2.5.1, *Special-Status Species*, wherein the Draft EIR analyzes bird strike 2-15

impacts over BCER. Page 3.2-40 acknowledges that, even after the Applicant's proposed measures, "…the Project could increase the amount of air traffic over [BCER]." The subsequent analysis and impact determination is contradictory: first, the narrative notes that "…with implementation of these measures, impacts from potential overflights are not expected to be significant," which assumes a potentially significant impact absent the measures, but then ends the discussion by stating "…the additional temporary activity of the annual operation of the Airshow would not significantly contribute to impacts to special-status birds within the BSA." If the first statement is correct, then staff notes that the "measures" (preactivity surveys and biological monitoring) are inadequate similar to MM HAZ-1 and MM HAZ-2, discussed immediately above, and the analysis on page 3.2-40 would require similar revisions. If the second statement is correct, then the EIR must be revised to provide substantial evidence for a less-than-significant impact determination. 2-15 (cont.)

The Commission strongly encourages the City, as the CEQA lead agency, to collaborate with CDFW, for those species under CDFW's jurisdiction, in the development of enforceable mitigation measures with performance criteria to demonstrate reduced impacts, supported with substantial evidence. 2-16

6. Drones: The Draft EIR failed to address Commission comments, submitted during the scoping period (please refer to page 8 of Attachment 1), on the use of drones throughout various Airshow activities. The Draft EIR neglects to analyze impacts on biological resources from the use of drones in the Show Center Area and Airshow Performance Area, or from accidental incursions or drone crashes into BCER. While unrelated to past airshows, the impact risk is more than theoretical given that in 2021[1] an illegally operated drone crashed in the BCER, resulting in approximately 3,000 Elegant Terns leaving their nesting grounds and abandoning an estimated 2,000 eggs, resulting in a massive reproductive loss for the species, which has only four known nesting sites left on earth. Staff recommend that the impacts of drones should be fully analyzed for performances held in the Show Center Area, Airshow Performance Area, and revised BSA (please refer to Comment 4 related to BCER) and appropriate mitigation measures should be included in the Final EIR. Mitigation measures could include, but not be limited to, requiring event Urban Air Mobility (UAM)/drone operators to utilize the FAA's B4UFly app (see CDFW webpage, CDFW Wildlife Areas and Ecological Reserves Added to FAA's Drone Mobile App (https://wildlife.ca.gov/News/Archive/cdfw-wildlife-areas-and-ecological-reserves-added-to-faas-drone-mobile-app)). In 2-17

[1] Wisckol, Martin, "Illegal drone scares terns, which abandon 2,000 eggs on Bolsa Chica nesting island". Orange County Register, June, 3, 2021. https://www.ocregister.com/2021/06/03/illegal-drone-scares-terns-which-abandon-3000-eggs-on-bolsa-chica-nesting-island/

addition, in accordance with the California Code of Regulations title 14, section 550 related to public use of CDFW lands, "No visitor shall operate any aircraft, drone, or other unmanned aircraft system…within department lands except as authorized by a Special Use Permit issued by the department." 2-17 (cont.)

Hazards and Hazardous Materials

7. Spills and Vehicle Discharges: Beach camping is an activity planned for Area C of the Show Center Area; this activity was not part of the Project during the NOP scoping period. The construction of the beach camping site would involve laying down and anchoring stadium flooring onto the beach to provide additional overnight parking for recreational vehicles (RVs). Staff note that while the Draft EIR includes Area C camping as part of the Project Description on page 2-9, all other camping discussions in the Draft EIR only identify Area G for RV camping (an area located upland of the beach). The EIR should analyze the risk of accidental spills or other discharges from RVs (e.g., fuels, oils, grey water and black water, trash) camping in Area C and provide mitigation or minimization measures, as appropriate for the level of significance. The EIR should also identify potential impacts from construction equipment or motorized vehicle spills on or adjacent to the beach and include a spill contingency plan as well as refueling restrictions. 2-18

8. Streamer Drops: Streamer drops, which are anticipated as part of the opening ceremony on each day of the Airshow, could pose a potentially significant impact to power lines in the BCER. If streamers were to fall on power lines, a fire could start in the active oil operation, endangering human health and safety. The EIR should identify the materials the streamers are made of and analyze this potentially significant impact. 2-19

Recreation

9. Public Access: The Draft EIR dismisses recreation impacts from further analysis in Section 5.1, *Environmental Impacts Not Found to be Significant*. One of the Project's stated objectives is to provide an event that "promotes coastal access," and staff have provided specific concerns related to coastal access to the Pier and beach during the Airshow event (Comment 12, page 10 of Attachment 1). The figures provided in the Draft EIR, including Figure 2-8, are not detailed enough to demonstrate how public access will be maintained throughout the event. The text of the Draft EIR only states (page 2-13) that "All Pier seating is landward of the State Lands Commission MHTL…only a portion of the Pier would be reserved for seated ticketholders and pier ingress and egress would still be provided" without describing through figures or photos how this would occur. Figures and/or a written description of how horizontal access to the beach would be maintained are 2-20

also not included in the Draft EIR. Staff reiterates these concerns, as originally submitted during the scoping period, and requests that this impact be analyzed and included in the EIR. 2-20 (cont.)

Thank you for the opportunity to comment on the Draft EIR for the Project. As a responsible and trustee agency, the Commission will rely on the Final EIR in amending or issuing a new lease. Staff requests that the City consider these comments before certifying the EIR. If the City, as it addresses comments and evaluates new impacts or revises impact discussions, identifies new significant impacts or substantial increases to an impact's severity (mitigated or unmitigated), then, pursuant to CEQA Guidelines section 15088.5(a), staff expect to be notified of the Draft EIR's partial or full recirculation for the opportunity to review and provide meaningful comment. 2-21

Please also send electronic copies of the Final EIR, Mitigation Monitoring and Reporting Program, Notice of Determination, approving resolution, CEQA Findings, and Statement of Overriding Considerations when they are final. Please note that federal and state laws require all government entities to improve accessibility of information technology and content by complying with established accessibility requirements. (29 U.S.C. § 794d; 36 C.F.R. § 1194.1 et seq.; Gov. Code, § 7405.) California State law prohibits State agencies from publishing on their websites content that does not comply with accessibility requirements. (Gov. Code, § 115467.) Therefore, any documents submitted to Commission staff during the processing of a lease or permit that will be posted online, including relevant CEQA documentation, must meet accessibility requirements for Commission staff to place the application on the Commission agenda. 2-22

Refer questions concerning environmental review to Robin Tuohy, Environmental Scientist, at Robin.Tuohy@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Jeffrey Plovnick, Public Land Management Specialist, at Jeffrey.Plovnick@slc.ca.gov.

Sincerely,

Nicole Dobroski, Chief
Division of Environmental Science, Planning, and Management

cc: Office of Planning and Research

R. Tuohy, Commission
J. Plovnick, Commission
L. Calvo, Commission
W. Hall, Commission

Attachment:

1) March 4, 2024, Notice of Preparation Comment Letter from Commission staff to the City of Huntington Beach

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

Contact Phone: 916.574.1900

March 4, 2024

File Ref: SCH # 2024020006

Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648
connor.hyland@surfcity-hb.org

Subject: Notice of Preparation for a Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project, Orange County

Dear Connor Hyland,

2-23

The California State Lands Commission (Commission) staff has reviewed the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Pacific Airshow Huntington Beach (Project or Airshow), which is being prepared by the City of Huntington Beach (City). The City, as the public agency that must issue a permit for the Project through their Specific Event Permit Process, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). Pacific Airshow LLC is applying for the permit and is proposing to carry out the Project. The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency. Commission staff requests that the City consult with us on preparation of the DEIR as required by CEQA section 21153, subdivision (a) and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

Staff contacted the City and event operator by letter in August 2023 (see attached 2023 letter) regarding the requirement for a Commission lease or lease amendment for the use of sovereign lands for the 2023 Airshow, as well as concerns regarding Airshow impacts on the Bolsa Chica Ecological Reserve

(BCER), which is owned and managed by the Commission. In February 2024, staff again sent letters to the City and event operator (see attached 2024 letter). As previously stated by letter to the City, staff requested coordination with the City and operator to reach a mutually satisfactory resolution on these matters and to achieve a satisfactory approach for the conduct of future Pacific Airshows. As part of the Commission's effort to work with the City, staff offers these comments on the NOP and Initial Study (IS).

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

2-23 (cont.)

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low-water mark and a Public Trust easement landward to the ordinary high-water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After review of the information contained in the NOP, there are several components of the Project that would require Commission authorization. The Commission authorized Lease PRC 6616, a General Lease – Public Agency Use, to the City for the operation and maintenance of an existing municipal pier (Huntington Beach Pier or Pier) and related concessions. That lease was authorized for a term of 25 years, beginning June 21, 2018. Staff is aware that the proposed Project will utilize the Pier. The City's lease acknowledges that the Lease Premises, including the Pier, are subject to the Public Trust and are available to members of the public. If the City proposes to close a portion of the pier within the Lease Premises to the general public, the City must obtain

Commission authorization through the form of an amendment to the existing lease or issuance of a new lease.

Another component of the proposed Project includes the placement of 16 large white buoys along a 12,000-foot line to be located 500 and 1,500 feet offshore, marking the Airshow Performance Area. This area would restrict public access and water-dependent recreation, including boating, during the event; such a restriction is not authorized by the City's lease. The lands waterward of the ordinary high-water mark remain ungranted sovereign lands under the management of the Commission. The placement of the buoys would constitute an additional encroachment on these sovereign lands, and in the absence of Commission authorization would constitute a trespass subject to the Commission's enforcement authority (Pub. Resources Code, §§ 6216.1, 6224.3 *et seq.*, 6301, 6303.1; 2 CCR § 3002). Therefore, the placement of the buoys in the ocean will require Commission authorization.

The proposed Project also includes a helicopter landing/runway display on a temporary helipad to be generally located within an open area directly in front of the Main Hospitality Area during the hours of the airshow. However, based on the current Project information, the proposed runway may encroach waterward of the ordinary high-water mark and within sovereign land subject to the Commission's leasing jurisdiction. In addition, construction activities associated with the proposed runway may temporarily encroach on sovereign land and require Commission authorization. Please provide staff with more detailed Project plans that show the specific proposed location of the landing/runway. 2-23 (cont.)

Therefore, the proposed Project will require an application for an amendment of the existing lease or a new lease. Information on the Commission's leasing process can be found online at www.slc.ca.gov/leases-permits/, the online application can be found at www.oscar.slc.ca.gov/, and any related questions can be directed to Mr. Kelly Connor (contact information below).

In addition, the Commission owns approximately 1,200 acres of sovereign lands in the BCER located within the Project's Temporary Flight Restriction (TFR) Area. The Commission leases these lands to the California Department of Fish and Wildlife (CDFW) for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of the BCER.

Project Description

Pacific Airshow LLC proposes the Pacific Airshow Huntington Beach Project to meet the following objectives and needs:

- Provide a spectacle-scale airshow in Huntington Beach that attracts attendees throughout the Southern California area and beyond.
- Feature civilian and military aircraft flybys and aerial acrobatics, air racing; and helicopter, electric vehicle, drone, and emerging aviation/mobility technology displays.
- Provide visitor-serving entertainment, services, and amenities.
- Provide an event that reduces potential impacts to the surrounding sensitive habitat including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover.

From the Project Description, Commission staff understands that the Project would include the following components that have potential to impact State sovereign land and Public Trust resources:

- Practice flyovers and flight paths: Practice flyover events are proposed to begin the Monday before the start date of the Pacific Airshow event.
- Airshow event activities: Aerial event activities are proposed to take place over a 3 to 5-day period. Event activities include daytime and nighttime events which start at 10:30 AM and nighttime flyovers and/or parachute jumps planned to take place during the evening hours.
- Beach Airstrip: The IS states that a helicopter landing/runway display activity (pg. 2-8) will be held on a temporary airstrip built out on the beach in front of the Main Hospitality Area (pg. 2-11).
- Pyrotechnic nightly shows: A nighttime proposed activity (pg. 2-8) that may be discharged from flyover aircraft, the Huntington Beach Pier, or an ocean barge.
- Event amenities: Event amenities, such as food trucks, wave pool, demonstrations, competitions, drones, and additional events.
- Trash containment and removal: Containment and removal of trash during the event and following the breakdown of the event.
- Single-use plastics: Event vendors providing services and amenities during the event will be strongly encouraged to not use plastic by the Project Sponsor (pg. 2-14).

2-23 (cont.)

Environmental Review

Commission staff requests that the City consider the following comments when preparing the DEIR to ensure that impacts to State sovereign land and Public Trust resources are adequately analyzed.

General Comments

1. Project Description: The Project description (PD) provided in the IS discusses former airshow events as well as future proposed airshow events that would include an expansion of the event from 3 to up to 5 days, with later event stop times (10 PM to 11 PM), and would include many additional proposed activities (e.g., pyrotechnic shows, nighttime music festival). The IS states that the performers and types of aerial activities are likely to change each year (pg. 2-10). The Project description for future airshow events is currently broad and lacks pertinent details for evaluating environmental impacts from all the proposed Project activities. All proposed activities and their environmental impacts must be evaluated in the DEIR. In addition, the DEIR must identify and describe the most impactful combination of activities that could possibly occur (the "worst-case scenario") and carry forward the full environmental impact analysis for that scenario.

   A thorough and complete PD should be included in the DEIR to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The PD should be as precise as possible in describing the details of all allowable activities that originate within or outside the IS's identified Project area (e.g., flight paths from origin airports for practice and event airshow activities, types of aircraft, maximum area of impact, locations of activities within the Project area, etc.), as well as the details of the timing and length of activities. Thorough descriptions will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work and activities that may be performed, and minimize the potential for subsequent environmental analysis to be required. 2-23 (cont.)

2. Project Description – Project Area: The IS states on pg. 2-1 that "The Show Center Area and Airshow Performance Area collectively comprise of the Project Site." However, many Project-related activities (e.g., Project-related flights) also occur within the Project's "temporary flight restriction (TFR) airspace" defined on pg. 2-1 as the "five nautical mile (NM) ring centered on the center of the Airshow's aerobatic box." For purposes of the DEIR, the definition of the Project Site should be expanded to encompass the TFR area. At a minimum, the DEIR should clearly identify a Project Study Area to include the Show Center Area, the Airshow Performance Area, and the 5 nautical mile TFR ring and fully describe and analyze all Project activities and impacts within. Staff encourages the City to work with Pacific Airshow LLC to incorporate Project design changes in the DEIR to avoid sensitive areas like the BCER and that include minimum flight altitude restrictions.

   In addition, the IS does not include the locations of the various event amenities within the Project area. Staff recommends having specific locations for these event amenities described in the DEIR.

3. CEQA Document: If the City is unable to identify a worst-case scenario for Project-level EIR analysis (see comment #1, above), then staff suggests that the City consider using a programmatic environmental impact report (PEIR). A PEIR may be more appropriate than a Project EIR to provide for flexibility in evaluating various activities or components during the projected 10-year timeline for the Pacific Airshow. In addition, a PEIR may allow for future CEQA documents and subsequent environmental impact analyses to evaluate any event activities that are not currently identified.

4. Required Approvals: Staff notes that the IS omits the Commission from the list of public agencies with approval authority over the Project. In the DEIR's Review and Approvals section, please include: 1) the Commission's Responsible agency review of the Final EIR and adoption of an independent Mitigation Monitoring Program, and 2) Approval of a State Lands Lease(s) and/or Lease Amendment. In the DEIR's list of public agencies whose approval is required, please include the Commission as a CEQA Responsible Agency.

5. Helipad/Temporary airstrip: The DEIR should expand upon the IS's description of the helicopter landing/runway display (IS pgs. 2-5, 2-8, 2-10, and 2-11) and clarify that the airstrip may be used for planes as well as helicopters. A recent February 15, 2024, media event promoting the Project featured Airshow operator Kevin Elliott and the City's Mayor each arriving at the beach on small planes. Local media covering the event reported, "For this year's air show, event organizers will construct a temporary runway on the beach where planes will land and take off right in front of spectators."[1] In addition, the IS states on pg. 2-8 that the temporary helipad will be constructed in front of the Main Hospitality Area to provide a landing/runway area for aerial performances. The DEIR should provide a robust description of the construction of this runway or airstrip and include the estimated depth of excavation, as repeated references to this project component in the IS describe construction activities as simply "at or near-grade on the sand" (pg. 3-19). 2-23 (cont.)

Biological Resources

6. Bolsa Chica Ecological Reserve and Special Status Species: BCER is home to over twenty-two special status species and is designated by the U.S. Environmental Protection Agency as a critical flyway for migratory birds. Pg. 2-6 of the IS states that "Preliminary Project objectives include" providing "an event that reduces potential impacts to the surrounding sensitive habitat

[1] Orange County Register, "Huntington Beach air show will land planes on the beach for this year's event" (Feb. 15, 2024)(https://www.ocregister.com/2024/02/15/huntington-beach-air-show-will-land-planes-on-the-beach-for-this-years-event/).

including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover."

However, to accomplish this objective, the DEIR must analyze the Project's potential impacts on these sensitive habitats and formulate enforceable mitigation measures to address the CDFW on-site management team's documented impacts on BCER that have occurred during past Airshows as stated in the August 25, 2023, joint letter from the Commission and CDFW, to the City and airshow operator, Code Four (see attached 2023 letter). While pg. 2-10 of the IS states that "many of the aircraft…seldom fly over land…", this statement conflicts with multiple observations over multiple years, as referenced in the letters sent by Commission on August 25, 2023, and February 20, 2024, to the City and the airshow operator. These letters document incidents during the 2021, 2022, and 2023 airshows of repeated low flyovers by the airshow jets that caused disruptions in the normal behavior patterns of many bird species, including feeding and sheltering, at BCER. These repeated low flyovers harassed the bird populations and caused them to take flight each time the airplanes flew over. This action is considered a "take" and is in violation of California Code of Regulations, title 14, section 251.1 and U.S. Fish and Wildlife regulations 50 CFR 17.3. Additionally, under sections 550, 630 (18), and 632 (121), (122) of title 14, no aircraft operations are permitted in a reserve, and low flyovers are in violation. The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C §§ 703-712) and include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C §§ 1531-1544), and the California Endangered Species Act of 1970 (Fish & G. Code, Ch. 1.5, §§ 2050-2115.5). 2-23 (cont.)

The DEIR should include an evaluation of noise and vibration impacts on fish, birds, and other wildlife from the event's operations activities (practice flyovers and aerial events, pyrotechnic shows, amplified sound, etc.) within the Project radius (5-mile TFR radius centered on the airshow performance area, IS Figure 3), which includes BCER. To support the DEIR's noise and vibrations analyses and environmental impact significance determinations, staff expects the document to also include representative flight paths for practice flyover and aerial event performances.

7. Existing and Regulatory Settings: For all land under the Commission's jurisdiction, the DEIR must disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project Site, including special status wildlife, fish, and plants, and if appropriate, identify

feasible mitigation measures to reduce those impacts. The City should conduct queries of the CDFW's California Natural Diversity Database and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special status plant or wildlife species that may occur in the Project area. The DEIR should also include a discussion of early consultation with the CDFW, USFWS, and National Marine Fisheries Service (NMFS), as applicable, and identify any potentially required permits identified by these agencies.

Additionally, the DEIR's regulatory setting for Biological Resources should include discussion of CDFW regulations prohibiting the use of any "aircraft, hovercraft, or hot air balloon" in Ecological Reserves and other CDFW sites without first obtaining a CDFW Special Use Permit (Cal. Code Regs., tit. 14, § 550 (aa)). The regulatory setting should also include other relevant laws and regulations pertaining to aircraft restrictions in CDFW sites.[2]

8. Drones: The IS states that drone and similar small aircraft technology will be flown as part of the Project, including on pg. 2-8 ("Aircraft static, EV, drone and other urban air mobility (UAM) technology displays and aerial competitions to occur") and pg. 2-9 ("The Applicant would conduct scheduled drone flights throughout the event days for capture of event promotional footage and documentation of event layouts in various areas"). The DEIR should include analysis of potential impacts should drones and similar technology stray into the BCER and include mitigation measures to avoid such impacts. Mitigation could include, but not be limited to, requiring Airshow UAM operators to utilize the FAA's B4UFly app. See *CDFW Wildlife Areas and Ecological Reserves Added to FAA's Drone Mobile App* (https://wildlife.ca.gov/News/Archive/cdfw-wildlife-areas-and-ecological-reserves-added-to-faas-drone-mobile-app#gsc.tab=0). A recent example of drone impacts occurred on May 12, 2021, when an illegally operated drone crashed in the BCER, resulting in approximately 3,000 Elegant Terns leaving their nesting grounds and abandoning an estimated 2,000 eggs,[3] resulting in a massive reproductive loss for the species, which has only four known nesting sites left on earth.[4]

2-23 (cont.)

9. Trash/Trash Removal: The DEIR should include best management practices and mitigation measures to ensure trash, including streamer drops from the Pacific Airshow's opening ceremonies, will be properly contained for the

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[2] Including but not limited to section 3503 of the Fish and Game Code and California Code of Regulations, title 14, sections 251, 251.1.

[3] See CDFW webpg., *Legal and Responsible Drone Operations: Wildlife Disturbance* (https://wildlife.ca.gov/Drones).

[4] National Public Radio, "A Single Drone Has Harmed A Generation Of Wildlife" (June 22, 2021)(https://www.npr.org/2021/06/22/1008986922/a-single-drone-has-harmed-a-generation-of-wildlife).

duration of the event and not overflow to the surrounding beach, water, and greater coastal area, including BCER. Trash can present environmental hazards to species through exposure or ingestion and lead to degradation of habitat. Staff also strongly encourages the Project sponsor to not only "strongly encourage," but require event vendors to avoid single-use plastics (i.e., carry-out bags, cutlery), to the extent feasible, as they are a danger to wildlife (e.g., ingestion, entanglements, etc.).

Air Quality

10. Criteria Pollutants: The IS identified a potentially significant impact to air quality, during the Pacific Airshow's operations phase, from a net increase of criteria pollutants. However, the IS also determined that "There would be no potential for construction or construction-related ground disturbance generating net new emissions or net new increase in short-term construction employment." (p.3-10) and "There would be no potential for construction or construction-related ground disturbance generating a considerable net increase in emissions of ozone precursors (VOC and NOX), PM10, and PM2.5. / No further analysis of this issue in the EIR is required." (p. 3-11) The IS also notes that the Project would include constructing a temporary airstrip on the beach in front of the Main Hospitality Area. Commission staff expects the City to include in the DEIR emissions modeling results for both construction- and operations-related criteria pollutant emissions as well as the associated impact analyses and feasible mitigation measures. 2-23 (cont.)

11. Air Quality Management Plan – existing non-attainment: The IS identified a less than significant impact when evaluating conflicts with or obstructions to the South Coast Air Quality District's (District) Air Quality Management Plan (AQMP). The District provides criteria to evaluate a Project's consistency, which includes "Criterion 1: Will the project result in any of the following: – An increase in the frequency or severity of existing air quality violations…" (p. 3-9). For those criteria pollutants where the region is already in non-attainment, the IS does not adequately discuss why a Project that creates a potentially significant impact by increasing the emission of criteria pollutants (pg. 3-11) does not also create an increase in the frequency and/or severity of the existing non-attainment violations. In addition, the IS artificially and improperly restricts new emissions to those occurring from "on-site" activities ("The competitions and art installations would not result in new emissions from on-site activities. The temporary event structures would also be similar in scale and location to previous Airshows since 2016 (except in 2020) and would not result in new emissions from on-site activities.")(*Id.*) By extending the airshow festival length and adding potential activities, the proposed Project does contemplate an increase in criteria pollutant emissions over any potential

CEQA baseline. The extended airshow festival will result in increased aircraft emissions that should be carried forward and analyzed in the DEIR.

Please also consider including emissions evaluations from idling cars sitting in traffic that could contribute to air quality impacts. The DEIR should thoroughly describe the impact of the Project on air quality and the efforts to avoid, minimize, and mitigate those impacts. Staff recommends the inclusion of traffic mitigations to help reduce further impacts to air quality.

Recreation

12. Public Access: The IS states on pg. 2-10 that "Access to the pier ocean ward [sic] of the seating area shall remain open to the public" and on pg. 2-12, "Public access (for non-ticket holders) to the Pier would remain open during future Airshows. Only a portion of the Pier would be reserved for seated ticketholders and pier ingress and egress would still be provided." Regarding coastline access, the IS states at pg. 3-41 that "vertical and horizontal access to the coastline would be maintained throughout the duration of the event." While the IS evaluates physical deterioration related to beach activity and beach use (pg. 3-50), the Recreation discussion does not include potential impacts to public use of and recreational opportunities on the beach or pier. As the City is not restricted to those questions suggested within the CEQA Guidelines, Appendix G checklist, please include the following impact question as part of the DEIR's recreation analysis: "Would the project interfere with existing public use of and recreational opportunities related to the pier and beach?" As part of the analysis, the document should detail, both in text and in diagrams and/or pictures, how public access to the pier and beach will be maintained. Staff recommends that the City consider incorporating public access monitors as potential mitigation to ensure that Project activities do not inhibit or discourage access to public beaches and the Huntington Beach Pier. 2-23 (cont.)

Hazardous Materials

13. Hazards and Hazardous Materials: Although the IS determined that there were no potentially significant impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (pg. 3-32), the Project has a potential significant impact related to Hazards and Hazardous Materials that should be further evaluated in the DEIR. For example, despite the statement on pg. 2-5 that no oil drilling or oil extraction occurs "within the nearby vicinity," numerous onshore oil wells and related pipelines are nearby, in addition to wells in and adjacent to the BCER. In fact, as the IS notes (pg. 2-5), the 2021 airshow was cut short by an oil spill originating from an offshore oil pipeline. While that particular incident represented an impact on the Airshow from existing activities, the converse is

also reasonably foreseeable, as the Project has the potential to exacerbate existing environmental risks due to the performance of high-risk aerobatic flights over active oil fields, including those in the BCER (*California Bldg. Indus. Ass'n v Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 377, 388-389.). Such overflights have occurred repeatedly in past years' airshows, despite the statement in the IS that airshow aircraft "seldom fly over land" (pg. 2-10). Thus, the reasonably foreseeable potential significant impact of an aircraft accident triggering an oil or hazardous material spill should be analyzed in the DEIR, along with avoidance strategies (for example, by avoiding overflights of BCER) and/or mitigation measures.

The IS states at pg. 2-9 that streamer drops are anticipated as part of the opening ceremony on each day of the Airshow. The DEIR should describe and analyze the potentially significant impact that could occur should streamers land on power lines in the BCER and start a fire. During the 2022 Airshow, streamer drops resulted in streamers landing in the BCER near powerlines, leading the BCER CDFW on-site manager to contact Commission staff with concerns about the risk of fire in the active oil field within the BCER. Please see the previous paragraph as well as comment #1, *Project Description*, for suggestions on Project design changes and requests for mitigation measures. 2-23 (cont.)

Tribal Cultural Resources

14. Consideration of Tribal Cultural Resources: The IS identifies potentially significant impacts to Tribal Cultural Resources (pg. 3-54) but reports that the Project activities would not result in any permanent structures and that no excavations, grading, or trenching would be associated with the construction phase. The inclusion of a beach airstrip in the Project area challenges this conclusion. AB 52 includes both procedural *and* substantive requirements, including the requirement that lead agencies strive to avoid significant adverse changes to tribal cultural resources, regardless of whether consultation is requested or occurs, and incorporate mitigation measures recommended by tribes unless the lead agency determines those suggestions are not feasible. Please note that it is the Commission's broader policy to go beyond the requirements of AB 52 by conducting outreach and consultation with all tribes culturally affiliated with a Project area, as determined by the Native American Heritage Commission, for a proposed Project that may have significant effects on tribal cultural resources. The Commission strongly encourages early, frequent, and meaningful engagement with all culturally affiliated tribes that may be affected by this Project.

Alternatives

15. Alternatives: Staff recommends the inclusion of a no-Project alternative to provide a baseline for establishing environmental conditions in the Project area. Additionally, if the PD is not revised to specify no overflights will occur over the BCER, then staff recommends the City identify and analyze an alternative which excludes flight paths over the BCER, to potentially reduce the level of impacts to State and Federally protected species. In addition to describing mitigation measures that would avoid or reduce the potentially significant impacts of the Project, the City should identify and analyze a range of reasonable alternatives to the proposed Project that would attain most of the Project objectives while avoiding or reducing one or more of the potentially significant impacts (see State CEQA Guidelines, § 15126.6).

Environmental Justice

16. Environmental Justice: Environmental Justice is defined by California law as "the fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Gov. Code § 65040.12) This definition is consistent with the Public Trust Doctrine's principle that management of trust lands is for the benefit of all people. The Commission adopted an updated Environmental Justice Policy and Implementation Blueprint in December 2018 to ensure that environmental justice is an essential consideration in the agency's processes, decisions, and programs. The twelve goals outlined in the Policy reflect an urgent need to address the inequities of the past, so they do not continue. Through its policy, the Commission reaffirms its commitment to an informed and open process in which all people are treated equitably and with dignity, and in which its decisions are tempered by environmental justice considerations. 2-23 (cont.)

    Although not legally required in a CEQA document, Commission staff suggests that the City include a section describing the environmental justice community outreach and engagement undertaken in developing the DEIR and the results of such outreach. The California Office of Environmental Health Hazard Assessment developed the CalEnviroScreen mapping tool to assist agencies with locating census tracts near proposed Projects and identifying the environmental burdens, should there be any, that disproportionately impact those communities. Environmental justice communities often lack access to the decision-making process and experience barriers to becoming involved in that process. It is crucial that these communities are consulted as early as possible in the Project planning process. Commission staff strongly recommends using the CalEnviroScreen

tool and then, as applicable, reaching out through local community-based organizations, such as Communities for a Better Environment and Orange County Environmental Justice. Engaging in early outreach will facilitate more equitable access for all community members. In this manner, the CEQA public comment process can improve and provide an opportunity for more members of the public to provide input related to environmental justice. Commission staff also recommends incorporating or addressing opportunities for community engagement in mitigation measures. Furthermore, a key goal in the Commission's Environmental Justice Policy and Implementation Blueprint is increasing and supporting equitable public access, as discussed in comment #12, above. Commission staff recommends the City consider environmental justice communities in their analysis. Commission staff will review the environmental justice outreach and associated results as part of any future Commission action.

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, Commission staff requests consultation on this Project and to be kept advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the DEIR is being prepared. 2-23 (cont.)

Please refer questions concerning environmental review to Robin Tuohy, Environmental Scientist, at Robin.Tuohy@slc.ca.gov and Christine Day, Environmental Scientist, at Christine.Day@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Kelly Connor, Public Land Management Specialist III, at Kelly.Connor@slc.ca.gov. For questions related to the BCER, please contact Wendy Hall, Environmental Program Manager, at Wendy.Hall@slc.ca.gov.

Sincerely,

Nicole Dobroski
Chief Division of Environmental Science, Planning, and Management

Attachments:

1) February 24, 2024, letter from Commission staff to City of Huntington Beach and Code Four
2) August 25, 2023, letter from Commission staff to City of Huntington Beach

cc: Office of Planning and Research
R. Tuohy, Commission

C. Day, Commission
K. Connor, Commission
W. Hall, Commission
L. Calvo, Commission
Y. Ramirez, Commission

2-23
(cont.)

Comment Letter 2: California State Lands Commission

Response to Comment 2-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 2-2

The Applicant submitted the SLC lease application (application number A0000004914) on Tuesday, January 7, 2025, to work with the SLC on authorizing components of the Project within SLC's jurisdiction.

Response to Comment 2-3

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 2-4

One of the Project Objectives, as provided in Chapter 2, *Project Description*, page 2-6, of the Draft EIR is to "Provide an event that reduces potential impacts to the surrounding sensitive habitat including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover." To achieve this objective, and as part of the *Project Description*, the Applicant will provide mandatory, daily, formal briefings each day of the Airshow regarding the location, nature, and sensitivity of the BCER. The Applicant will request an avoidance of overflights over this area and, when overflights of the BCER cannot be avoided, the Applicant will request that overflights occur at 1,000 feet AGL or higher. To further reduce potential impacts to sensitive species, as stated on pages 2-10 and 2-11 of Chapter 2, *Project Description*, "Because pilots could be instructed by the ATC to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the pre-Airshow activities as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas." As reflected in Master Response D, the biological monitoring efforts have been expanded to also include monitoring during all pre-Airshow days (that include practice flights), as well as a number of other, additional monitoring requirements.

The combination of daily flight briefings, biological monitoring (refer to Master Response D), and the timing of the Airshow relative to the nesting season refer to Master Response C) provides substantial evidence that the Project would reduce potential impacts to the surrounding sensitive habitat including the BCER, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover.

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. Refer to Master Response C for a discussion on timing of the Airshow relative to the nesting season and Master Response D for a more detailed discussion of the biological resource monitoring efforts. Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 2-5

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 2-6

Refer to Response to Comment 2-2 for a discussion of the California State Lands Commission lease application/permit process.

While the commentor requests recirculation of the Draft EIR, Section 15088.5(a) of the CEQA Guidelines indicates recirculation is only necessary if significant new information is provided showing that a new significant environmental impact would occur; a substantial increase in the severity of an environmental impact would occur; if a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; or if the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043). Section 15088.5(b) of the CEQA Guidelines states that "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." The comments received on this Draft EIR do not meet any of the requirements of Section 15088.5(a) of the CEQA Guidelines, as demonstrated by this Response to Comments document, and, instead, satisfy the mandate provided by Section 15088.5(b) of the CEQA Guidelines.

Response to Comment 2-7

[This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 2-8 (Nesting Season)

Refer to Master Response C for a discussion on timing of the Airshow relative to the nesting season.

Response to Comment 2-9 (Biological Monitoring)

Refer to Master Response D for a more detailed discussion of the biological resource monitoring efforts.

Response to Comment 2-10

The following text changes will be made to Chapter 2, *Project Description*, page 2-15, of the Draft EIR:

Review and Approvals

The Airshow is anticipated to require the following review and approval by the City of Huntington Beach as the Lead Agency under CEQA and the California State Lands Commission as a Responsible Agency under CEQA:

- Certification of the Final Environmental Impact Report.
- Issuance of a Coastal Development Permit (CDP) from the California Coastal Commission (CCC).
- Approval of a State Lands Lease(s) and/or Lease Amendment from the California State Lands Commission.
- Approval of the Specific Event Permit Application.

Response to Comment 2-11

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

No flights have dropped below 1,000 feet AGL during any prior Airshows. The only aircraft that would have flown over the BCER would be the Thunderbirds due to their routine and maneuvering packages. Further, in 2024, no overflights were below 1,000 feet AGL pursuant to the Applicant's request of all military aircraft, although the ultimate decision was made by the individual pilots. It is not possible to obtain the average elevation of flights during the Airshow as this information is visible only for the pilot from the altimeter within the cockpit. According to the Applicant, there are multiple daily helicopter operations within the BCER that operate below 500 feet AGL. Daily, there are numerous commercial flights, private jets, and private general aviation aircraft that fly over the BCER.

Response to Comment 2-12

Refer to Master Response C for a discussion of the nesting season relative to the Airshow and Master Response D for a discussion of the biological monitoring efforts before and during future Airshows to avoid and/or minimize impacts to potentially nesting birds, if they occur late in the nesting season, as well as the results of biological monitoring that occurred during the first two days of the 2023 Airshow (September 29, 2023, and September 30, 2023), which did not detect noise-related impacts to sensitive species during flyovers or the presence of nests.

Response to Comment 2-13

With respect to the disposal of trash and debris, Chapter 2, *Project Description*, page 2-10 of the Draft EIR, specifically states that: "All materials, trash, and debris would be removed from the beach and disposed of off-site daily and at the conclusion of the Airshow." Chapter 2, *Project Description*, page 2-14, of the Draft EIR goes on to state that "The Applicant would be responsible to replace all full trash can liners throughout the venue and to place the trash from the bins into the dumpsters to then be removed by Republic Services following the conclusion of the Airshow. The Applicant would encourage all food vendors to avoid plastics (straws, cups, lids) and recommend use of paper straws or straw less lids."

Response to Comment 2-14

Mitigation Measure HAZ-1 states that a qualified avian biologist will conduct a Wildlife Hazard Site Visit (WHSV) following the protocol developed by the FAA in the *Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans* (Federal Aviation Administration, Advisory Circular 150/5200-38, August 2018) to evaluate potential risk of wildlife strikes at airports (hereafter referred to as the FAA Protocol). The FAA Protocol does not require the WHSV to be conducted during a particular time period. However, the WHSV will be conducted prior to the Airshow, as outlined in Mitigation Measure HAZ-1, to document wildlife activity to inform the WHSV memorandum. If any observations made during the WHSV identifies any potential safety hazards from wildlife, recommendation to reduce those hazards will be made and provided to the Applicant and the City prior to the Airshow.

Observations of potential safety hazards from wildlife made during the Airshow, as required by Mitigation Measure HAZ-2, will inform recommendations to reduce those hazards for future Airshows. Observation made prior to and during the 2023 Airshow will also be used to inform the wildlife hazard recommendations in coordination with the Applicant.

The purpose of Mitigation Measures HAZ-1 and HAZ-2 are to address the hazards presented by birds with respect to aircraft and pilot safety. Alternatively, the biological monitoring identified in the Project Description is to ensure there are no significant impacts to sensitive species caused by aircraft activity during the Airshow.

Response to Comment 2-15

The full text of Section 3.2, *Biological Resources*, page 3.2-40, of the Draft EIR states that:

> *Although the Applicant would provide daily formal briefings each day of the Airshow to all pilots about the sensitivity of BCER and would request avoidance of overflights over the area, the Project could increase the amount of air traffic that occurs over the Bolsa Creek Ecological Reserve. Because pilots could be instructed by the ATC to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure*

> *that no Airshow-related debris drifts into sensitive ecological areas. With implementation of these measures, impacts from potential overflights are not expected to be significant.*

The measures that are referenced in this text are not mitigation measures, which would be used if a potentially significant impact was identified, but avoidance measures contained in Chapter 2, *Project Description*, of the Draft EIR. The use of avoidance measures is further supported by the biological resources monitoring that occurred as part of the 2023 Airshow, which did not detect noise-related impacts to sensitive species during flyovers or the presence of nests. Further, both the CDFW and the existing oil rig operator regularly use aircraft for ongoing work operations at the BCER, which presumably can occur because the operation of that aircraft similarly does not result in an on-going impact on sensitive birds (or other species) in the area due to the relatively temporary nature (meaning, takeoff and landing, although occurring more regularly than the Airshow and also within the nesting season). Further, there are numerous daily flights operated by commercial and private aircraft that also occur over the BCER (and also within the nesting season). As stated on page 3.2-40 of the Draft EIR:

> *With the existing conditions of numerous daily flights by commercial and private aircraft that occur over BCER as well as the regular use of the helipad located within BCER from which flights regularly operate, the additional temporary activity of the annual operation of the Airshow would not significantly contribute to impacts to special-status birds within the BSA.*

Because the monitoring efforts have been expanded, both in terms of timing and activities, as reflected in Master Response D, the following text changes will be made to Section 3.2, *Biological Resources*, of the Draft EIR:

Page 3.2-40

> Above ground, flights associated with the Airshow could result in bird strikes. According to a 2006 study, the majority of bird strikes (74 percent) occur within 500 feet AGL (Dolbeer 2006). In addition, the FAA reported that 70 percent of bird strikes from 1990 to 2022 occurred at 500 feet AGL (FAA 2023). The majority of the flights planned for the Airshow are expected to fly 500 to 1,000 feet above mean sea level (MSL) and would only occur during the Airshow hours (historically between 10:00 AM and 5:00 PM) and at nighttime, when bird activity is lower. As discussed above, numerous daily flights by commercial and private aircraft currently fly over the BCER and helicopters regularly land at a helipad located within the BCER next to the tidal inlet. Although the Applicant would provide daily formal briefings each day of the Airshow to all participating pilots about the sensitivity of BCER and would request avoidance of overflights over the area, the Project could increase the amount of air traffic that occurs over the Bolsa Chica Ecological Reserve. ~~Because pilots could be instructed by the FAA to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into sensitive ecological areas.~~ Because pilots could

be instructed by the Air Traffic Control (ATC) to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. The specific monitoring efforts will include the following:

- A qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) will conduct a preactivity survey of the areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area. These surveys will occur one day before any pre-Airshow activities and continue through every day of pre-Airshow and Airshow activities to observe baseline avian behavior and the effects of the Airshow on bird behavior.
- The qualified biological monitor will be present in areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area during the Airshow to monitor bird activity and reactions during the event.
- If nests are found, the qualified biologist shall establish a 300-foot buffer for CEQA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area shall not be entered.
- Trash and debris in the vicinity of nest sites or other sensitive habitats shall be removed by or at the discretion of the qualified biologist.
- During the 2023 Airshow, no noticeable change in avian behavior was observed and no California least tern or western snowy plover were observed. If a noticeable change in behavior (i.e., flushing or flying off) by state and/or federally listed species (e.g., western snowy plover, California least tern, and/or Belding's savannah sparrow) is observed by the biological monitor resulting from flyovers during future Airshows, the monitor will consult with the City and the Applicant to propose an increase in flight elevation, recognizing that the FAA, flight controllers, and the pilots ultimately determine flight elevations.
- Following the conclusion of the annual Airshow, the biological monitor will prepare a post-Airshow report to: (1) document observations, including reporting any relevant information to the CNDDB website and/or CDFW's Vegetation Classification and Mapping Program (although the focus of the monitoring efforts is on avian species); (2) identify measures that were taken, as needed, to avoid potential impacts to nesting or sensitive species; and (3) provide recommendations for future Airshows. The report will be made available to the public on the City's website.

With implementation of these measures, impacts from potential overflights are not expected to be significant.

Page 3.2-42

The Project may temporarily impact wildlife movement within the BSA as a result of aircraft flyovers. This increased presence could disrupt local movement and displace wildlife within the BSA. Natural reserves and open space areas including BCER and the Huntington Beach Wetlands found to the north and south of the Show Center Area offer refuge for displaced wildlife utilizing upland habitats can disperse to other upland areas in the vicinity, and the temporarily impacted areas would not significantly inhibit local or regional movement of wildlife within these avoided areas of the BSA. Wildlife that is more sensitive to human disturbances and noise may be deterred by the Project related activities. The BCER is an important area in the Pacific Flyway for migratory birds species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C 703–712). The BCER is also under the protection of California Fish and Wildlife Code Section 630(17) of Title 14 (CDFW 2023c), which states that "no aircraft operations are permitted in a reserve, and low flyovers are in violation." Sound pollution and repeated overhead flyovers can pose a threat to wildlife or harass wildlife species when they occur directly over an occupied area causing bird populations to take flight each time a plane or low flying aircraft fly over. While the proposed flight path to the Airshow Performance Area is planned to occur 500 to 1,000 feet west of the BCER, over the Pacific Ocean, a helicopter landing/runway display would occur on a temporary aircraft landing pad to be located within the Show Center Area during the hours of the Airshow. The Airshow Performance Area and the Show Center Area are located approximately 2.5 miles south of the BCER with performances scheduled to occur over the Pacific Ocean. Therefore, performances and flyovers will not take place directly over BCER. Also, during the Airshow, planes are expected to fly between 500 to 1,000 feet above MSL (as previously stated, most strikes occur below 500 feet) within the flight path to and from the Show Center Area. Aircraft would be instructed to avoid flying over BCER. A majority of the flights planned for the Airshow would occur 1,000 feet above MSL and would only occur during the Airshow hours (between 10:00 AM and 5:00 PM). Additionally, the operator will provide daily formal briefings each day of the Airshow to all operators on the sensitivity of BCER and request avoidance of overflights over the area. Because there is a chance that pilots could be ~~planes are~~ instructed by the ATC to fly over BCER, each year, preactivity surveys and biological monitoring will be conducted as part of the Project, at least one day prior to the pre-Airshow activities and during the operation of the Airshow to confirm if Airshow activity is impacting bird behavior, as well as watching that no Airshow-related debris drifts into sensitive ecological areas. The specific elements of the biological monitoring efforts are described under Section 3.2.5.1, *Special-Status Birds*. Thus, it is not anticipated that the Project will result in temporary indirect impacts to BCER.

Response to Comment 2-16

Refer to Response to Comment 3-9 for a discussion of the methodology for the biological resources analysis. As discussed in Master Response D, any relevant observations during the monitoring efforts will be reported to the CDFW's CNDDB website and/or CDFW's Vegetation

Classification and Mapping Program (although the focus of the monitoring efforts is on avian species). Further, all monitoring information will be made available to the public. Lastly, the MMRP will include all mitigation measures identified in the Draft EIR, as well as certain Project Description features that will be voluntarily included in the Project's MMRP.

Response to Comment 2-17

The drone crash that previously occurred within the BCER noted by the comment was not related to the Airshow.

The Airshow temporary flight restriction (TFR) is a strict "no drone zone." The only drones that fly within the Airshow's TFR are authorized by the Airshow and are directed by pilots who participate in the daily briefings regarding Airshow operations, including in the Airshow's FAA waiver. All pilot documents are collected and provided to the FAA, similar to all pilots who participate in the Airshow. Launching civilian drones within the Airshow's TRF could result in criminal charges with notable fines. Further, the Airshow obtains anti-drone technology that is deployed each year during the Airshow to mitigate and bring down trespassing drones. As such, the Airshow does not use the FAA's B4uFly app, which is only used to show where recreational flyers can and cannot fly.

As further discussed in Master Response C, the Airshow is scheduled to occur outside of the nesting season (defined as March 15-September 15 for this project), including the nesting season for elegant tern (early April to mid-June [Animal Diversity Web 2025][5]), during the fall (end of September/beginning of October) as discussed in Section 2.6.1 and Section 3.2.5.2 Migratory Wildlife Corridors. Therefore, nesting birds are not anticipated to be impacted by the Airshow, including drone activities. Biological monitoring and surveys have been conducted during the 2023 Airshow to identify potential impacts on bird behavior resulting from Airshow activities, including drone flights, and no noise-related impacts were observed nor were nesting birds.

Response to Comment 2-18

The commentor is correct in noting that RV camping would be allowed in Area G, while beach camping would be allowed in Area C. As noted in Chapter 2, *Project Description*, on page 2-9, of the Draft EIR, "Beach camping generally to take place with the Seating/Activations Area (Area C) and may involve using more ABS flooring to allow for recreational vehicles to park on the sand for the duration of the Airshow weekend, generally arriving Thursday and departing Sunday after the conclusion of the Airshow or Monday morning." Tent camping is unlikely to result in any hazardous materials spills due to the nature of the activity, and RV camping would contain all septic waste within the RV since there are no sewer hoses along the beach. All trash will be disposed of as identified in Response to Comment 2-13.

Response to Comment 2-19

In 2022, there was a single incident where the Army, not Airshow activities, accidentally dropped streamers further down the beach to avoid dropping them in front of the event attendees and disrupting the Airshow. A single streamer ultimately was transported into the BCER. The

5 ADW: Sterna elegans: INFORMATION

streamer was quickly recovered by marine safety. As part of the mandatory in-person or virtual daily formal briefings each day of the Airshow, the Applicant requests that if streamer drops are required, they must be landed near the aerobatic box and away from the BCER or other sensitive areas.

Response to Comment 2-20

Refer to Response to Comment 1-6 for a discussion of public access.

Response to Comment 2-21

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 2-22

The City will either send the MMRP, Notice of Determination, any approving resolutions, CEQA Findings, and Statement of Overriding Considerations to the California State Lands Commission when they are available or post them on the City's website and inform the Commission of their availability.

Response to Comment 2-23

In their comment letter, the commentor notes that "Staff have attached the comment letter submitted on March 4, 2024, during the Notice of Preparation comment period Attachment 1) and will refer to it throughout this section." Accordingly, this Responses to Comments document responds to those Notice of Preparation comments that were specifically raised in the Commission's Draft EIR comment letter. No further response is required.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Comment Letter 3

April 7, 2025

Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach
2000 Main Street, 4th Floor
Huntington Beach, California 92648
Connor.Hyland@surfcity-hb.org

Subject: DRAFT ENVIRONMENTAL IMPACT REPORT for the Pacific Airshow Huntington Beach Project, SCH No. 2024020006, ORANGE COUNTY, CA

Dear Connor Hyland:

The California Department of Fish and Wildlife (CDFW) reviewed the Draft Environmental Impact Report (DEIR) from the City of Huntington Beach (City) for the Pacific Airshow Huntington Beach Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife.

3-1

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

Proponent: Kevin Elliott, Pacific Airshow LLC (Project proponent/Applicant)

3-2

Objective: The Project would provide an Airshow in Huntington Beach that features civilian and military aircraft flybys and aerial acrobatics; air racing; electric vehicle and

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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drone displays; competitions and shows; and, displays of other emerging aviation/mobility technologies. To achieve this, the Project will use a temporary runway on the beach for helicopters and aircraft. Additional Project features include visitor-serving entertainment, services, and amenities that include but are not limited to: a variety of viewing areas, vehicle and aircraft demonstrations; illustrations; flight simulations; merchandise tents; concessions; food trucks; live music entertainment; skateboard and bicycle motocross bowl competitions; sandcastle building competitions; art installations; and, pyrotechnic shows. This event has been held annually in the City during the fall season each year since 2016, except in 2020 due to the COVID-19 pandemic. Airshow activities will typically begin at approximately 10am and may extend to 11pm. New events that have not historically occurred include multi-day air racing; a music festival; nighttime flyovers including parachute jumps onto the beach; nightly pyrotechnic shows to be discharged from either aircraft or an ocean barge; and, landing aircraft on a temporary runway on the beach.

Location: The Project is in the City of Huntington Beach, which is in coastal Orange County. The on-the-ground event portion of the Airshow (the "show center area") is located on the beach; its boundaries are approximately from 7th Street to Beach Boulevard along Pacific Coast Highway, and from Pacific Coast Highway to the Pacific Ocean (including a portion of the Huntington Beach Pier). The Project describes the Airshow performance area as being the primary area for aircraft flybys and aerial acrobatics. This performance area is over the Pacific Ocean, adjacent to the show center area, with an east-west length of approximately 3,000 feet and a north-south length of approximately 12,000 feet. The performance area is identified by 16 buoys placed in the ocean. Many of the aircraft flights spill out of the performance area into the temporary flight restriction (TFR) airspace administered by the Federal Aviation Administration (FAA) for the airshow. The TFR is a five-nautical mile ring centered on the airshow's performance area. The show center area and the airshow performance area collectively comprise the Project Site. For the purposes of technical analysis within the DEIR, a broader study area was defined that extends beyond the Project Site to reflect the potential impacts associated with civilian and military flybys and aerial acrobatics transiting to/from the Airshow performance area.

3-2 (cont.)

Timeframe: Future airshows are anticipated to be held for three to five days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow.

Settlement: The City and the Project proponent entered into a *Settlement Agreement and General Release*[2] (Settlement), effective May 9, 2023, following litigation pertaining to the City's cancellation of the final day of the Airshow in 2021. The Settlement contemplates the City conducting environmental review as required by CEQA. The Settlement also requires that if the Project proponent desires to conduct future

3-3

[2] https://cms3.revize.com/revize/huntingtonbeachca/SETTLEMENT%20AGREEMENT%20AND%20GENERAL%20RELEASE_FINAL_SIGNED.pdf

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airshows, they and the City will enter into a separate “Air Show Event Agreement” to hold at least one airshow event per year, on dates selected by the Project proponent, for a term of 10 years with the option to renew up to 3 times for additional 10-year terms.

3-3 (cont.)

Biological Setting: The Project Site and surrounding areas contain a wide variety of extraordinarily sensitive habitats and wildlife species, including both terrestrial and marine resources. The area immediately surrounding the Project Site contains various protected coastal wetlands, including Bolsa Chica Ecological Reserve (BCER). BCER is an approximately 1,300-acre coastal estuary which contains open water, mudflats, coastal dunes, riparian habitats, freshwater marsh, and saltwater marsh. BCER’s saltwater marsh is one of largest remaining in Southern California. More than 200 avian species have been identified there. BCER is an important stopover along the Pacific Flyway for hundreds of migratory bird species. CDFW is responsible for on-site management of BCER, which provides important habitat for sensitive wildlife species, including:

- Western snowy plover (*Charadrius nivosus nivosus*; Federal Endangered Species Act (ESA)-listed threatened, California Species of Special Concern (SSC))
- Light-footed Ridgway’s rail (*Rallus obsoletus levipes*; ESA-listed endangered, California Endangered Species Act (CESA) listed endangered, State Fully Protected (FP))
- Coastal California gnatcatcher (*Polioptila californica californica*; ESA-listed threatened, SSC)
- Belding’s savannah sparrow (Passerculus sandwichensis beldingi; CESA-listed endangered)
- California least tern (*Sterna antillarum browni*; ESA-listed endangered, CESA-listed endangered, FP)
- White-tailed kite (*Elanus leucurus*; FP)
- Peregrine falcon (*Falco peregrinus anatum*)
- Burrowing owl (*Athene cunicularia*; CESA candidate)
- Northern harrier (*Circus hudsonius*; SSC)
- Cooper’s hawk (*Accipiter cooperii*; CDFW Watch List (WL))
- Osprey (*Pandion haliaetus*; WL)
- Tricolored blackbird (*Agelaius tricolor*; CESA-listed threatened)
- California brown pelican (*Pelecanus occidentalis californicus*)
- Short-eared owl (*Asio flammeus*; SSC)

Additionally, less than three miles from the center of the airshow performance area, there are two marine protected areas: Bolsa Bay State Marine Conservation Area (SMCA) and Bolsa Chica Basin SMCA. Under the State Marine Life Protection Act, SMCAs protect tidal lands, wetlands up to the mean high tide line, fish, and fish habitat for many species that are both state and federally managed.

3-4

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Project History: CDFW has an extensive history communicating with the FAA, the California Coastal Commission, the State Lands Commission (SLC), the United States Fish and Wildlife Service (USFWS), and the City regarding the Airshow and its impacts to wildlife. On August 25, 2023, CDFW and SLC jointly sent a letter to the City describing impacts to birds due to the 2021 and 2022 airshows. These impacts included aircraft dropping streamers in BCER, and repeated low flyovers by military aircraft that flushed sensitive birds. In that letter, CDFW and SLC emphasized that sound pollution and low overhead flights posed a threat to birds and other wildlife. CDFW also provided the City with comments during the public review period for the Initial Study and Notice of Preparation for this Project, in a letter dated March 4, 2024[3]. At that time, CDFW again voiced concerns about impacts to BCER and the sensitive species therein. CDFW attaches those prior communications because they remain relevant and applicable to the Project and the DEIR. 3-5

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Additional comments or other suggestions may also be included to improve the document.

COMMENT # 1: General Disclosure and Mitigation of Impacts to Biological Resources

Issue: The DEIR does not provide a clear, full disclosure and analysis of potentially significant impacts to biological resources, nor does it include mitigation measures to reduce those impacts to a level of less than significant.

Specific Impact: Without a full disclosure and analysis of the Project's effect on biological resources, including mitigation measures in a Mitigation, Monitoring, and Reporting Plan (MMRP), the Project is very likely to have significant adverse effects on special status species due to the Project occurring during bird nesting season, or aircraft flying over BCER (either during or outside of bird nesting season). Furthermore, without robust avoidance, minimization, and mitigation measures, the Project as described will interfere substantially with the movement of native resident or migratory wildlife species, with established native resident or migratory wildlife corridors, and impede the use of native wildlife nursery sites. 3-6

Why impact would occur: The DEIR dismisses potential significant impacts to biological resources by improperly relying on assumptions that certain activities would occur (described below), and improperly concludes that impacts to biological resources will be avoided. However, there are no actual measures or other enforceable 3-7

[3] Available at: https://files.ceqanet.opr.ca.gov/295302-1/attachment/t54ROc5yulkIGs6au1ip-fpXNsaQryPCQ5ToRpV_DiKthRZqPyWygsSIapUJ4vZFMtdAdmzc_Qd7TvU60

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mechanisms to ensure the DEIR's assumptions would in fact occur, nor does the DEIR analyze and disclose impacts to biological resources that would occur in the absence of the assumptions. This contrasts with the requirements of CEQA and the DEIR's own *Approach to Environmental Analysis* (DEIR Section 3.0.2) which states, "[t]he project-level analysis will estimate the impacts to each resource category before the implementation of applicable mitigation measures. The analyses will then estimate the impacts to each resource category after the implementation of applicable mitigation measures." Assumptions relied upon in the analysis and for which there is no basis to enforce or otherwise ensure the assumptions are accurate include:

a. the Airshow would not be scheduled during bird breeding season – it is improper to assume this because the Project proponent has discretion to determine when the Airshow would occur per the Settlement;
b. the Project proponent would provide daily formal briefings each day of the Airshow to all pilots about the sensitivity of BCER – it is improper to assume this because there is nothing in the DEIR that contemplates this as an enforceable measure, nor is there any other information in the DEIR that indicates the City can require this measure;
c. the Project proponent would request avoidance of overflights over BCER – it is improper to assume this because there is nothing in the DEIR that contemplates this as an enforceable measure, nor is there anything else provided to the public that would indicate the City can require this measure, moreover, it is not up to the City or the Project proponent to finalize flight paths because, according to the DEIR, the FAA has ultimate authority over flight paths;
d. when overflights of the BCER cannot be avoided, the Project proponent would request that overflights occur at 1,000 feet above ground level or above – it is improper to assume this because there is nothing in the DEIR that contemplates this as an enforceable measure, nor is there anything else provided to the public that would indicate the City can require this measure; and
e. because pilots could be instructed by the FAA to fly over the BCER, pre-activity surveys and biological monitoring would be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas - it is improper to assume this because there is nothing in the DEIR that contemplates this as an enforceable measure, nor is there anything else provided to the public that would indicate the City can require this measure.

3-7 (cont.)

As mentioned above, there is no information in the DEIR to indicate that these assumptions can be relied upon to reduce or otherwise avoid potentially significant effects. This is especially the case because the City appears to have no control over the Project proponent's implementation of the Project in accordance with the assumptions either due to the Settlement or the lack of any information in the DEIR to indicate the enforceability of such measures. Specifically, it is not clear within the context of the Settlement and Air Show Event Agreement requirement if the Project proponent will be

3-8

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required to abide by the assumptions, or how the City will enforce the assumptions. Section 2.b. of the Settlement states, in part, that the Air Show Event Agreement, "will be based on, and supported by, the completed aforementioned CEQA environmental review, and consistent with the terms of the [Settlement]." Because the Air Show Event Agreement will be based on this environmental review, the City should commit to requiring the assumptions as mitigation measures and ensure they are included in the Air Show Event Agreement so that the Airshow is required to implement them. 3-8 (cont.)

Nevertheless, because Project elements like flight path are outside the City and Project Proponent's control, the Project's potentially significant impacts to biological resources should be analyzed in the DEIR without reliance on the assumptions. Without disclosure, analysis, and mitigation, the Project could result in significant adverse effects to sensitive nesting, overwintering, migrating, and resident bird species due to the Project occurring during bird nesting season or aircraft flying over BCER (either during or outside of bird nesting season). 3-9

Evidence impact may be significant: The DEIR should provide an adequate, complete, and detailed disclosure about the significant effects which the Project may have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, § 15151). Such disclosure is necessary so CDFW, the public, and decisionmakers may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as assess the significance of the specific impact relative to the environment, in particular plant and wildlife species impacted for CDFW (e.g., current range, distribution, population trends, and connectivity). Furthermore, unlike the assumptions discussion in the Biological Resources section of the DEIR, mitigation measures should be memorialized in a MMRP table and written so as to be enforceable (CEQA Guidelines § 15126.4). Finally, absent real avoidance, minimization, and/or mitigation measures, impacts to listed species would also be considered significant pursuant to CESA and/or the federal Endangered Species Act. 3-10

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #1: Revised analysis. CDFW strongly recommends that the City revise its discussion and analysis of impacts to biological resources, and provides mechanisms to enforce all the assumptions outlined above. If the City cannot enforce the assumptions, then the Biological Resources impact analysis should be based on the Project as it would occur without those assumptions in place (e.g., assess impacts associated with the Project occurring during the bird nesting season, assess impacts with aircraft flying over BCER, etc.). This analysis should include compensatory mitigation for significant impacts as appropriate. If the City asserts that the assumptions are enforceable, then the City should provide evidence as to how the assumptions would be enforceable, the assumptions should be rewritten as enforceable mitigation measures, and be included in the DEIR's MMRP table. 3-11

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COMMENT # 2: Nesting Bird Disturbance

Issue: Impacts to nesting birds, including fully protected, CESA-listed, and ESA-listed species, are likely to be significant due to the lack of any enforceable mechanism for the City to control when the Airshow will be held, and no stated enforceable mitigation.

Specific Impact: Because of the Settlement, there does not appear to be any mechanism for the City to restrict the timing of the Airshow to outside the breeding season. The DEIR relies on the assumption that the Airshow will be scheduled outside the bird breeding season; however, the Settlement indicates that the Project proponent has the right and ability to select the dates for future Airshows, including during important nesting periods for light-footed Ridgway's rail, California least tern, and western snowy plover, as well as a wide variety of common bird species. As detailed in this letter, holding the Airshow during the bird nesting season is likely to result in significant effects to all, or a combination of, the birds identified in the Biological Setting section of this letter.

Why impact would occur: In discussing the potential of the Project to affect birds, the DEIR acknowledges that special-status birds are known to occur in the area and use the beaches and coastal marshes for nesting. The DEIR also indicates that there are breeding sites for California least terns and western snowy plovers that are fenced off from public access. The DEIR does not, however, acknowledge that California least terns and western snowy plovers have also been observed nesting outside the confines of those fenced areas, nor does it discuss other special-status bird species that nest on the beach or in the coastal wetlands. The areas surrounding the show center area, including Huntington Beach, BCER, and other coastal wetlands, are vital habitats for a variety of native species. As the largest coastal wetland remaining in California, BCER supports a heavy concentration of breeding birds.

3-12

Because of the ground-nesting behaviors of these species, disturbance of nesting due to Project implementation is prevalent. For example, disturbance from aircraft overflights, fireworks, vehicles, pedestrians, and even blowing trash can result in flushing of nesting birds, increased predation, crushing of eggs, reduced fitness of chicks, and decreases in reproductive success (Jefferson, et al. 2022). Individually, or in combination, the aforementioned impacts can result in significant effects to individual birds as well as a bird population as a whole. For example, California least terns, like many colonial ground nesting birds, rely on coordinated attacks, or mobbing behavior to protect their nests from predators (Jefferson, et al. 2022). In other words, the entire tern colony will react together to resolve a threat. Flushing birds from their nests leaves eggs and chicks vulnerable to thermal exposure and to predators that can take advantage of the parents' absence to prey on eggs and chicks and decimate a nesting site in a short amount of time. Repeated flushing can cause nest abandonment. Therefore, an aircraft or individual/spectator could result in a colony leaving their nests resulting in impacts associated with such flushing.

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Another example of the Project likely resulting in a significant effect on nesting birds involves Western snowy plovers. While not colonial, Western snowy plovers frequently nest within or near tern colonies, and can exhibit increased reproductive success because of the defensive behaviors of terns (Powell 2001). While many different factors combine to influence the reproductive success of birds, nest abandonment remains a primary concern and the Airshow is likely to result in such abandonment if it occurs during the nesting season.

In their 2024 review of California least tern activity at Huntington State Beach (Huntington Beach Wetlands Conservancy 2024), the Huntington Beach Wetlands Conservancy stated:

> *Overall, since 2008, abandonment has been the major cause of nest loss at this colony. Human disturbance is most likely a major cause for egg non-viability and abandonment which together accounted for over 50% of failed nests (36 nests/63 failed nests). The near constant flushing of birds from the nest reduces incubation time. Fourth of July celebrations on the beach cause disturbance at the colony. In 2024, a boat stationed at the river entrance adjacent to the colony set off fireworks. By July 9, the colony activity was depressed and the colony effectively abandoned. As in previous years, helicopters flying and drone flights over the colony caused the terns to flush from the nests. Paragliders launching from the Santa Ana River channel and flying low over the colony caused the birds to flush frequently in past years.*

3-12 (cont.)

Although the aforementioned impacts are not the result of the Airshow, low flyovers by jets will have similar effects if they occur during the nesting season. As mentioned in this letter in Comment #4, although the DEIR seems to improperly discount potential impacts from the Airshow based on current activity by aircraft, even if such approach in the DEIR is accurate, which it isn't, the DEIR should, at a minimum, account for the cumulative effect on nesting birds arising from the Airshow.

Another major threat to chicks is insufficient nutrition (Scopel and Diamond 2017). In response to disturbance, some birds may stay longer on the nest, which reduces the time available to forage for food for chicks. Additionally, birds may forage further afield than usual, in order to avoid heavily populated areas or aircraft disturbance, which also leads to reduced feeding of chicks. California least terns are particularly vulnerable, and experience significant loss of chicks in years with low fish abundance.

Depending on where in a species' breeding cycle the Airshow occurs, disturbances can have varying results (Ellenberg, Mattern and Seddon 2013; Jefferson, et al. 2022). If the Airshow occurs just prior to or at the beginning of nesting season, birds may choose not to nest in the area at all. In the case of California least terns and western snowy plovers, the areas near the Project Site represent important breeding sites, with high density of nests. The closest protected tern and plover nesting areas are Seal Beach 3.75 miles to

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the north and Upper Newport Bay Ecological Reserve 6.75 miles to the south. In the absence of a suitable nesting site, an entire season's reproductive effort could be lost. If the Airshow begins after nests have been established, disturbance could lead to mortality of eggs and chicks from nest abandonment, trampling by people or dogs visiting the Airshow, or increased presence of predators drawn to trash and parental absence. If the Airshow occurs toward the end of the nesting season, fledglings could be scared off before they have accumulated the necessary fat reserves to successfully complete migration to their wintering grounds.

Evidence impact may be significant: Least terns and light-footed Ridgway's rails are listed as endangered under both the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA) and are also fully protected under FGC section 3511(b)(6). As a fully protected species, take cannot be authorized by CDFW. CDFW considers adverse impacts to a species protected by CESA to be significant. Take of any endangered, threatened, or candidate species is prohibited, except as authorized by state law (Fish & G. Code §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). 3-12 (cont.)

As mentioned in the preceding section, individual birds and populations would be affected by the Project during the nesting season. Nests could be abandoned, eggs and/or chicks may not survive, or a season of nesting could be precluded. By itself or in combination, any of these impacts are likely to be significant to individual birds or their population on either a specific or cumulative basis.

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #2: Breeding Season Avoidance. If the City is able to restrict the timing of future Airshows, CDFW recommends Mitigation Measure #1 (detailed below) be included in the DEIR and its MMRP table. If the City is unable to restrict timing, CDFW recommends the City include Mitigation Measures #2, #3, and #4, detailed below.

Recommendation #3: Compensatory Mitigation. CDFW recommends the DEIR include a range of potential compensatory mitigation options to offset impacts to nesting birds resulting from the Airshow. Options to explore include conservation and/or restoration of nesting habitat; funding for infrastructure work at conserved coastal wetlands to improve water circulation and habitat conditions; and providing funding to managers of California least tern and western snowy plover nesting colonies for ongoing efforts (i.e., fence repair and predator control). CDFW cautions the City that due to the various factors that could affect the resources, working closely with the Wildlife Agencies and other coastal wetland managers is critical to ensuring that the impacts of the Project will be reduced to below a level of significance. 3-13

Mitigation Measure #1: Breeding Season Avoidance. In order to avoid impacts to breeding birds, Airshow activities (including set up and teardown) shall not occur between January 1 and September 15.

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Mitigation Measure #2: Nest Site Surveys and Buffers. The Project proponent shall engage a qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) to survey the technical study area for nesting birds. If nests are found, the qualified biologist shall establish a 300-foot buffer for CESA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area should not be entered. A qualified biologist may determine that additional buffer distance is biologically warranted.

Mitigation Measure #3: Nest Site Monitoring. The Project proponent shall monitor nest sites, including those discovered during the nest site survey and those permanently designated as nest sites (western snowy plover and California least tern nesting areas), during the entire run of the Airshow to ensure spectators do not enter nesting areas and trash and debris are not introduced. Trash and debris shall be removed by or at the direction of a qualified biologist.

Mitigation Measure #4: Compensatory Mitigation. The City shall work closely with CDFW and USFWS (collectively, the Wildlife Agencies) and other coastal wetland managers to determine local needs and develop a compensatory mitigation scenario to be included in the DEIR. This mitigation shall be identified in advance of the Airshow to address certain types of effects and then chosen for implementation after the Airshow to specifically address whatever effects that occurred.

3-13 (cont.)

COMMENT # 3: General Avian Disturbance

Issue: Project impacts to migratory and permanent resident avian species are likely to be significant due to the lack of any enforceable mitigation.

Specific Impact: Most aircraft are expected to fly 500 to 1,000 feet above mean sea level (MSL) during their performances, and pilots could be instructed to fly over BCER on their way to or from the performance area. The impacts of low-flying aircraft on the bird species at BCER and other coastal wetlands are significant and should not be underestimated. Behavioral disruptions, increased stress, and habitat alteration caused by jets and other aircraft flying at low altitudes threaten the health and survival of migratory, resident, and wintering birds.

Why impact would occur: CDFW staff and other groups have had opportunity to observe the behavior of birds at BCER in response to overflights, including many instances where birds were displaced from the property or flushed.

a. On September 30, 2021, military jets associated with the Airshow were filmed executing low flyovers over seasonal ponds and Bolsa Basin in BCER. Approximately 450 individual birds were estimated to have flushed as a result of

3-14

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one such flyover. CDFW staff observed another low flyover that day that resulted in the flushing of osprey from a perch in Bolsa Bay.

b. After the 2022 Airshow, CDFW photographed streamers that had been dropped into BCER that resulted in flushing birds.
c. Subsequently, CDFW requested that for the 2023 airshow, no flyovers occur over BCER, and that no streamers or other debris be dropped over BCER. Hundreds of pelicans were disturbed and seen flushing after jets flew over BCER during the Airshow despite requests that such flyovers be avoided.
d. Observations of flushing continued during the 2024 Airshow. Species impacted by the hundreds of individuals include brown pelican, black bellied plover, western sand piper, and red-necked phalarope. More than 20 western snowy plover individuals were also recorded flushing as a result of jet activity.
e. Flight Tracker activity, taken by CDFW staff, documents continued low flyover over BCER, despite continued requests and requirements for avoidance. (Staff observations, electronically on file with CDFW)

Behavioral responses to aircraft disturbances add to the daily energy expenditure of birds. When birds are disturbed, they can react with altered behaviors, such as agitation or flushing. Also, a bird may exhibit no outward signs of distress but experience an elevated heart rate (Ellenberg, Mattern and Seddon 2013), increased oxygen consumption, and change in metabolic rate, thus disrupting the bird's energy budget (Kempf and Hüppop 1998). Even outside breeding season, such disturbances can have a high impacts on the individual bird as well as the population. In the winter, birds may require more energy to maintain their body temperature. During the non-breeding season birds need to forage as much as possible to build up fat stores for migration, upcoming breeding activity, or harsh winter conditions (Kempf and Hüppop 1998). Birds that rely on BCER for food and shelter could temporarily abandon these habitats during the Airshow, leading to a loss of critical resources during key times, such as during migration or overwintering periods. This disruption can have significant consequences for their overall health, survival, and reproductive success resulting in significant effects to both individual birds as well as the population.

3-14 (cont.)

The proposed timing of the Airshow overlaps with the migratory periods for many species of birds traveling along the Pacific Flyway. As coastal wetlands are important stopovers for annual migration, aircraft disturbances in those areas will affect a large number of birds. Migratory birds rely on specific cues, including environmental factors such as light, temperature, and quiet, to guide their journeys. The presence of high-decibel noise and physical disturbances from aircraft can interfere with these cues, potentially delaying or disrupting migration. This disruption could affect the birds' ability to arrive at their final destination on time, impacting their survival and reproductive success (Schummer and Eddleman 2003). It can also interfere with the birds' flight paths, leading to potential collisions or forced changes in migration patterns. Noise and physical presence of aircraft may also affect the landscape and vegetation used by birds for cover and nesting. While the Airshow is relatively short-lived, repeated

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disturbances over time may lead to cumulative effects that alter the use of BCER's habitat by avian species.

Many species of waterfowl and shorebirds also use BCER as a wintering ground. Shorebirds rely heavily on BCER's mudflats for feeding during migration. Western snowy plover winters and breeds at BCER and can be sensitive to even minor disturbances. Raptors, such as the northern harrier, burrowing owl, and short-eared owl that winter at BCER are particularly at risk, as they tend to remain in one location for extended periods. Disruptions can cause these birds to leave critical feeding or resting areas, reducing their chances of survival during harsh winter conditions. Resident species that live year-round at BCER may also be affected by the Airshow. Species such as the Belding's savannah sparrow and light-footed Ridgway's rail, which are already vulnerable due to habitat loss and predation, may be further stressed by the noise and disruption caused by the event. All the effects mentioned in this paragraph and the preceding ones are likely to result in significant effects to individual birds as well as their populations.

Evidence impact may be significant: CEQA provides protection for special status species, including ESA- or CESA-listed species, Species of Special Concern, and Fully Protected Species (CEQA Guidelines § 15380). The DEIR does not provide an adequate analysis of the potential impacts to special status species, nor does it include mitigation for potential impacts. Inadequate avoidance, minimization, and mitigation measures for impacts to special status species will result in the Project having a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by the Wildlife Agencies.

3-14 (cont.)

Furthermore, the DEIR does not provide an adequate analysis of the potential impacts to migratory patterns or breeding success of birds, nor does it include mitigation for potential impacts. Inadequate avoidance, minimization, and mitigation measures for impacts to migrating or nesting birds will result in the Project continuing to interfere substantially with the movement of native resident or migratory birds or with established migratory corridors or impede the use of native wildlife nursery sites. These are all significant effects on birds and their populations.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #5: Monitoring of Bird Behavior. The Project proponent shall engage a qualified biologist (familiar with bird behavior and possessing all necessary permits) to monitor and assess the effects of the Airshow on bird behavior. Monitoring shall occur at BCER, as well as other locations where birds congregate and that may be affected by the Airshow. Monitoring shall include one or more days prior to the start of Airshow activities, to provide a baseline measurement, and shall continue daily until the end of the Airshow. Observations shall be made of bird behaviors and aircraft passing over the study area. The Project proponent shall coordinate with the Wildlife Agencies to develop appropriate study design, methodology, and reporting (see also

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recommended Mitigation Measure # 8 below). If monitoring demonstrates a significant impact to nesting birds, compensatory mitigation as outlined in Mitigation Measure #4 will be implemented, and additional avoidance measures shall be implemented to avoid future impacts. The Wildlife Agencies shall be given the opportunity to review and provide feedback on additional Airshow avoidance measures. 3-14 (cont.)

COMMENT # 4: <u>Flyover Disturbance</u>

Issue: As analyzed in the DEIR, impacts to BCER as a result of flyover disturbance are not mitigated to below significant.

Specific Impact: CDFW disagrees with the conclusion that the Project will not result in significant biological resources impacts due to flyover disturbance. Analysis of these impacts in the DEIR is, again, based on specious assumptions as outlined in Comment #1 and not supported by evidence. In fact, it is contradicted by CDFW observations of prior Airshow activity. The Airshow will increase the amount of air traffic that occurs over BCER, Airshow-related debris could drift into sensitive habitat areas, and birds are likely to be displaced due to Project activities.

Why impact would occur: It is inappropriate to compare Airshow-related flyovers to existing conditions at BCER. The DEIR discounts the potential of the Project to impact biological resources because other aircraft fly over BCER, and points to operation of aircraft from the helipad adjacent to BCER (incorrectly identified as being located within the Ecological Reserve) to demonstrate that the airshow will not cause disturbance to birds. The DEIR includes *Table 3.2-2*, which lists Flight Aware aircraft flight observations within the biological survey area for March 11, 2024, to demonstrate “ambient overflight conditions”. 3-15

The effort to equate Airshow flyovers to existing conditions is uncompelling for several reasons. For one, the helicopter that uses the helipad next to BCER does not generally cross over BCER; it crosses the beach as it flies to and from an offshore oil platform. In addition, the pilot and CDFW staff coordinate successfully to adjust flight paths as needed to avoid flocks of birds that are loafing under the usual path or other unusual conditions. Second, on the day used in the DEIR to demonstrate ambient flight conditions, 17 aircraft flew over BCER. All but three were at or over 2,000 feet above ground level as they passed over BCER, and none were below 1,300 feet. This is in contrast to observed overflights during past years’ airshows, where multiple aircraft passed over BCER at low altitudes (i.e. well below 1,300 feet) and caused birds to flush (mentioned in Comment #3). Third, while birds may become habituated to aircraft that they encounter frequently, that tolerance will not extend to novel encounters with aircraft of the type that would occur during the Airshow (van der Kolk, et al. 2024). The reaction of a bird to an aircraft will vary depending on factors such as the species of bird, whether they are on a nest, and their familiarity with the particular aircraft. Differences in aircraft size, shape, speed of travel, altitude, and noise level will elicit differing responses. Some birds react strongly to the visual of hang gliders and parachutes, while

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some react to the sound of loud aircraft. For some species, large slow aircraft are more threatening than smaller aircraft (van der Kolk, et al. 2020). Some species react more strongly to helicopters than jets, some the opposite (Fuller, McChesney and Golightly 2018). A stimulus that seems to have a low impact to humans may be perceived by a bird as threatening (Ellenberg, Mattern and Seddon 2013).

Evidence impact may be significant: CEQA provides protection for special status species, including ESA- or CESA-listed species, Species of Special Concern, and Fully Protected Species (CEQA Guidelines § 15380). The DEIR does not provide an adequate analysis of the potential impacts to special status species, nor does it include mitigation for potential impacts. Inadequate avoidance, minimization, and mitigation measures for impacts to special status species will result in the Project continuing to have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by the Wildlife Agencies.

Furthermore, the DEIR does not provide an adequate analysis of the potential impacts to migratory patterns or breeding success of birds, nor does it include mitigation for potential impacts. Inadequate avoidance, minimization, and mitigation measures for impacts to migrating or nesting birds will result in the Project continuing to interfere substantially with the movement of native resident or migratory birds or with established migratory corridors or impede the use of native wildlife nursery sites. All the effects mentioned in Comment #3 and this Comment #4 are likely to result in significant effects to individual birds as well as their populations.

3-15 (cont.)

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #4: Flyover Impacts. CDFW recommends that the DEIR include measures to avoid, reduce, and compensate for impacts associated with low-level flyovers. Measures should clearly indicate that they apply to all aspects of the Airshow, including aircraft flight familiarization and flight practice flyovers, and that they apply to all types of aircraft, including parachutes, gliders, and drones. It should also be clear in the DEIR that the measures apply to aircraft involved in photographing the Airshow.

Mitigation Measure #6: Participant Education. The Project proponent shall conduct daily formal pre-flight briefings to familiarize all pilots with the sensitivity of BCER and other coastal wetlands. These briefings shall be held each day of the Airshow, including days with aircraft flight familiarization and flight practice flyovers. The Project proponent shall notify CDFW of all pre-flight meeting times and allow the opportunity for CDFW staff to participate in the meetings. The Project proponent shall coordinate with CDFW each day prior to the meeting in order to have the most current information regarding sensitive resources within BCER.

Mitigation Measure #7: Flight Over BCER. The Project proponent shall encourage pilots to avoid flying over BCER. The Project proponent shall inform participants that coastal wetlands, including BCER, are considered noise-sensitive areas, as that term is

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used in FAA Advisory Circular No: 91-36D[4]. The Project proponent shall encourage pilots to observe the voluntary practices contained therein. In particular, pilots shall be encouraged to maintain an altitude of at least 2,000 feet above ground level when flying over BCER or other coastal wetlands. A copy of the advisory circular shall be included in the participant information package, and it shall be discussed at pre-flight meetings.

Mitigation Measure #8: Post Action Report and Coordination. Within 60 days following the Airshow, the Project proponent shall provide a Post Action Report to the City, the Wildlife Agencies, and other stakeholders. The report shall, at a minimum, summarize the results of the monitoring (see recommended mitigation measure #4 above), any issues that arose during the Airshow and measures that were taken as a result, compensatory measures proposed to offset any impacts (see recommendation #3 above related to compensatory mitigation), and suggested improvements for future Airshows. Upon request, the Project proponent shall meet with the City, the Wildlife Agencies, and/or other stakeholders to discuss the Post Action Report and any proposed additional mitigation measures that would further decrease impacts from future Airshows.

3-15 (cont.)

ADDITIONAL COMMENTS

Scope of the Project. While alluded to in other places in our letter, CDFW requests that the scope of the Project be expanded to include, and that all mitigation measures apply to, flight rehearsals leading up to the Airshow. Activities that may have impacts to biological resources post event should also be included.

3-16

Bird Strike Hazard. CDFW recommends the City clarify the timing limits of Airshow flights in relationship to bird strikes. Currently, the DEIR says that no flights related to the airshow are planned to occur at night, so, "…the potential for impacts to aircraft from collisions with migratory birds are expected to be less than significant" (page 3.3-11); however, other places in the document say that there will be night flights, potentially as late as 11:00pm (page ES-4). The issue of bird strike with regard to the temporary landing area should also be revisited. The DEIR does not identify the methods that will be used to mitigate bird strike hazards for the temporary runway, but it does indicate hazing could be employed. CEQA requires that if a mitigation measure could, itself, have impacts, those impacts must be disclosed and analyzed in the DEIR (CEQA Guidelines, § 15126.4(a)(1)); therefore, CDFW recommends the DEIR disclose the measures that will be required to mitigate bird strike hazards, analyze the potential impacts to biological resources that could occur as a result of those measures, and include them in a MMRP table. Bird strikes and any bird hazing should be included in the report mentioned in Mitigation Measure #7 in order to develop appropriate compensatory mitigation for the effects to ensure they will be less than significant, either on an individual, specific basis, or from the perspective of a cumulative effect on birds.

3-17

[4] https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/23156

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Results of Bird Behavior Monitoring. CDFW recommends that the City include the data and a discussion of past monitoring efforts, including methodologies and results, in the environmental document to better inform its analysis of the Project's effects on biological resources. This includes data on the behavior of birds in response to aircraft as well as the monitoring that occurred during the 2023 airshow. Mitigation measures based on discussion of this data should be included in an MMRP table. 3-18

Mitigation and Monitoring Reporting Plan. CDFW recommends the Project's environmental document include mitigation measures recommended in this letter. CDFW has provided comments via a mitigation monitoring and reporting plan to assist in the development of feasible, specific, detailed (i.e., responsible party, timing, specific actions, location), and fully enforceable mitigation measures (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The Lead Agency is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation Monitoring and Reporting Plan (Attachment A). 3-19

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB website[5] provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[6]. The City should ensure data collected for the preparation of the DEIR is properly submitted. 3-20

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.) 3-21

[5] https://wildlife.ca.gov/Data/CNDDB
[6] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit

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CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the City in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of any forthcoming hearing date(s) for the Project. 3-22

Questions regarding this letter or further coordination should be directed to Jennifer Turner[7], Senior Environmental Scientist Supervisor.

Sincerely,

DocuSigned by:
5991E19EF8094C3...

Victoria Tang
Environmental Program Manager
South Coast Region

ATTACHMENTS

Attachment A: Draft Mitigation, Monitoring, and Reporting Program

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ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measures	Timing	Responsible Party
Mitigation Measure #1: Breeding Season Avoidance. In order to avoid impacts to breeding birds, Airshow activities (including set up and teardown) shall not occur between January 1 and September 15.	During the Project	Project Proponent
Mitigation Measure #2: Nest Site Surveys and Buffers. The Project proponent shall engage a qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) to survey the technical study area for nesting birds. If nests are found, the qualified biologist shall establish a 300-foot buffer for CESA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area should not be entered. A qualified biologist may determine that additional buffer distance is biologically warranted.	During the Project	Project Proponent
Mitigation Measure #3: Nest Site Monitoring. The Project proponent shall monitor nest sites, including those discovered during the nest site survey and those permanently designated as nest sites (western snowy plover and California least tern nesting areas), during the entire run of the Airshow to ensure spectators do not enter nesting areas and trash and debris are not introduced. Trash and debris shall be removed by or at the direction of a qualified biologist.	During the Project	Project Proponent

3-23

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Mitigation Measures	Timing	Responsible Party
Mitigation Measure #4: Compensatory Mitigation. The City shall work closely with CDFW and USFWS (collectively, the Wildlife Agencies) and other coastal wetland managers to determine local needs and develop a compensatory mitigation scenario to be included in the DEIR. This mitigation shall be identified in advance of the Airshow to address certain types of effects and then chosen for implementation after the Airshow to specifically address whatever effects that occurred.	Before, during, and after the Project	Project Proponent
Mitigation Measure #5: Monitoring of Bird Behavior. The Project proponent shall engage a qualified biologist (familiar with bird behavior and possessing all necessary permits) to monitor and assess the effects of the Airshow on bird behavior. Monitoring shall occur at BCER, as well as other locations where birds congregate. Monitoring shall include one or more days prior to the start of Airshow activities, to provide a baseline measurement, and shall continue daily until the end of the Airshow. Observations shall be made of bird behaviors and aircraft passing over the study area. The Project proponent shall coordinate with CDFW to develop appropriate study design and methodology.	Before, during, and after the Project	Project Proponent
Mitigation Measure #6: Participant Education. The Project proponent shall conduct daily formal pre-flight briefings to familiarize all pilots with the sensitivity of BCER and other coastal wetlands. These briefings shall be held each day of the Airshow, including days with aircraft flight familiarization and flight practice flyovers. The Project proponent shall notify CDFW of all pre-flight meeting times and allow the opportunity for CDFW staff to participate in the meetings. The Project proponent shall coordinate with CDFW each day prior to the meeting in order to have the most current information regarding sensitive resources within BCER.	During the Project	Project Proponent

3-23 (cont.)

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Mitigation Measures	Timing	Responsible Party
Mitigation Measure #7: Flight Over BCER. The Project proponent shall encourage pilots to avoid flying over BCER. The Project proponent shall inform participants that coastal wetlands, including BCER, are considered noise-sensitive areas, as that term is used in FAA Advisory Circular No: 91-36D[8]. The Project proponent shall encourage pilots to observe the voluntary practices contained therein. In particular, pilots shall be encouraged to maintain an altitude of at least 2,000 feet above ground level when flying over BCER or other coastal wetlands. A copy of the advisory circular shall be included in the participant information package, and it shall be discussed at pre-flight meetings.		
Mitigation Measure #8: Post Action Report and Coordination. Within 60 days following the Airshow, the Project proponent shall provide a Post Action Report to the City, the Wildlife Agencies, and other stakeholders. The report shall, at a minimum, summarize the results of the monitoring (see recommended mitigation measure #4 above), any issues that arose during the Airshow and measures that were taken as a result, compensatory measures proposed to offset any impacts (see recommendation #3 above related to compensatory mitigation), and suggested improvements for future Airshows. Upon request, the Project proponent shall meet with the City, the Wildlife Agencies, and/or other stakeholders to discuss the Post Action Report and any proposed additional mitigation measures that would further decrease impacts from future Airshows.		

3-23 (cont.)

[8] https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/23156

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Mitigation Measures	Timing	Responsible Party
Recommendation #1: Revised analysis. CDFW strongly recommends that the City revise its discussion and analysis of impacts to biological resources, and provides mechanisms to enforce all the assumptions outlined above. If the City cannot enforce the assumptions, then the Biological Resources impact analysis should be based on the Project as it would occur without those assumptions in place (e.g., assess impacts associated with the Project occurring during the bird nesting season, assess impacts with aircraft flying over BCER, etc.). This analysis should include compensatory mitigation for significant impacts as appropriate. If the City asserts that the assumptions are enforceable, then the City should provide evidence as to how the assumptions would be enforceable, the assumptions should be rewritten as enforceable mitigation measures, and be included in the DEIR's MMRP table.	Before the Project	The City
Recommendation #2: Breeding Season Avoidance. If the City is able to restrict the timing of future Airshows, CDFW recommends Mitigation Measure #1 (detailed below) be included in the DEIR and its MMRP table. If the City is unable to restrict timing, CDFW recommends the City include Mitigation Measures #2, #3, and #4, detailed below.	Before the Project	The City
Recommendation #3: Compensatory Mitigation. CDFW recommends the DEIR include a range of potential compensatory mitigation options to offset impacts to nesting birds resulting from the Airshow. Options to explore include conservation and/or restoration of nesting habitat; funding for infrastructure work at conserved coastal wetlands to improve water circulation and habitat conditions; and providing funding to managers of California least tern and western snowy plover nesting colonies for ongoing efforts (i.e., fence repair and predator control). CDFW cautions the City that due to the various factors that could affect the resources, working closely with the	Before the Project	The City

3-23
(cont.)

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Mitigation Measures	**Timing**	**Responsible Party**
Wildlife Agencies and other coastal wetland managers is critical to ensuring that the impacts of the Project will be reduced to below a level of significance.		
Recommendation #4: Flyover Impacts. CDFW recommends that the DEIR include measures to avoid, reduce, and compensate for impacts associated with low-level flyovers. Measures should clearly indicate that they apply to all aspects of the Airshow, including aircraft flight familiarization and flight practice flyovers, and that they apply to all types of aircraft, including parachutes, gliders, and drones. It should also be clear in the DEIR that the measures apply to aircraft involved in photographing the Airshow.	Before the Project	The City

3-23
(cont.)

Comment Letter 3: California Department of Fish and Wildlife

Response to Comment 3-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 3-2

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 3-3

The *Settlement Agreement and General Release,*[6] executed between Pacific Airshow LLC and the City of Huntington Beach on May 9, 2023, dictates (not contemplates) that the City will complete environmental review pursuant to the California Environmental Quality Act. The commentor correctly describes the conditions of the May 9, 2023, Agreement relative to future Airshow events. No further response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 3-4

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Appendix D, *Biological Resources Technical Report*, of the Draft EIR, evaluated the potential to occur for all of the species identified by the commentor, with the exception of the peregrine falcon, northern harrier, and short-eared owl. The Peregrine falcon, northern harrier, and short-eared owl were not addressed as they did not appear as an identified species in the five-quadrangle USGS topographic map search area of the study area, which included Newport Beach, Seal Beach, Anaheim, Tustin, and Laguna Beach.

Response to Comment 3-5

Refer to Response to Comment 2-19 for a discussion of the use of streamers. Refer to Response to Comment 2-15 for a discussion of the routine use of aircraft by the CDFW and oil rig operator as part of ongoing operations at the BCER, as well as the daily commercial and private aircraft flights that fly over the BCER. Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

6 SETTLEMENT AGREEMENT AND GENERAL RELEASE_FINAL_SIGNED.pdf, accessed on April 24, 2025.

Response to Comment 3-6

Refer to Response to Comment 3-9 for a discussion of the methodology for the biological resources analysis. Further, the MMRP includes all mitigation measures identified in the Draft EIR and also voluntarily includes Project Description features (e.g., biological monitoring) to ensure enforceability.

Response to Comment 3-7

Refer to Master Response C for a discussion of the nesting season relative to the Airshow. Further, the daily formal briefings, which include a request that overflights over the BCER are avoided and any overflights, if they must occur, are at or above 1,000 feet AGL, and the biological monitoring before and during the Airshow, are included as part of the Project proposal and, as such, are included in Chapter 2, *Project Description*, of the Draft EIR. These activities have occurred as part of past Airshow operations and based on the 2023 biological monitoring, no noise-related impacts to sensitive species (as a result of flyovers) nor were the presence of nests detected. Further, as previously mentioned, there is routine use of aircraft by the CDFW and oil rig operator as part of ongoing operations at the BCER, as well as the daily commercial and private aircraft flights that fly over the BCER, which also occur during the March to September nesting season; similarly, there is no documentation of biological impacts as a result of these separate aircraft activities. As such, the above-identified features are part of the Project, rather than imposed as mitigation measures, the latter of which would only be used to if there were documented potentially significant impacts. However, to ensure enforceability of the biological monitoring efforts, this Project Description feature will be voluntarily included in the Project's MMRP. The daily briefings have and will continue to occur and the outcome of those briefings cannot be guaranteed; therefore, this Project Description feature is not included in the MMRP.

Response to Comment 3-8

Refer to Response to Comment 3-9 for a discussion of the methodology for the biological resources analysis. Further, the MMRP includes all mitigation measures identified in the Draft EIR and also voluntarily includes Project Description features (e.g., biological monitoring) to ensure enforceability.

Response to Comment 3-9

Refer to Master Response C for a discussion of the nesting season relative to the Airshow. Refer also to Response to Comment 3-7 for discussion of the various Project Description features, which have occurred during previous Airshows, that avoid or reduce potential biological resource impacts. Further, refer to Master Response D for a discussion of the additional biological monitoring efforts, beyond those already conducted for the 2023 Airshow, that will be conducted for future Airshows to further ensure that impacts to sensitive species would be avoided or reduced.

The Draft EIR analyzes the potential environmental impacts of the Project using the baseline conditions (as of 2023), which included baseline biological surveys and the information from biological monitoring that occurred during the 2023 Airshow, as well as the various Project

features that have historically been provided during Airshows (e.g., daily briefings and are part of the Project), as compared to the identified thresholds of significance. Further, in preparation for baseline biological surveys, a literature review was conducted that included a review of special status species and habitats with the potential to occur within the proposed project area. The results of the literature review and baseline surveys are found in Appendix D to the Draft EIR.

Response to Comment 3-10

Refer to Response to Comment 3-9 for a discussion of the methodology for the biological resources analysis.

Response to Comment 3-11

Refer to Response to Comment 3-7 regarding the use of project features, as opposed to mitigation measures, and the enforceability of Project Description requirements. Refer to Master Response C for a discussion of the nesting season relative to the Airshow. Refer to Response to Comment 3-9 regarding the method of analysis for potential impacts of the Project.

Response to Comment 3-12

Refer to Master Response C for a discussion of the nesting season relative to the Airshow. Further, the commentor mentions the potential disturbance to California least tern nests as a result of the Project and also points to Fourth of July celebrations and paragliders launching from the Santa Ana River channel in past years. According to the U.S. Fish and Wildlife Service, the nesting season for the California least tern is from mid-April to mid-September.[7] Even the earlier pre-Airshow activities would occur at least one week beyond the identified nesting season for the California least tern.

In terms of the western snowy plover, according to a document entitled *Western Snowy Plover Nesting at Bolsa Chica, Orange County, California 2022* (Peter Knapp, California Department of Fish and Wildlife, and Rachel Woodfield, Merkel & Associates),[8] "The recognized breeding season of the western snowy plover normally extends from March 1 through September 15." In 2022, according to the above-cited document, "The first snowy plover nest was established on March 25, which was two weeks earlier than 2021. The last brood fledged on September 10." Therefore, as with the California least tern, even the earlier pre-Airshow activities would occur at least one week beyond the identified nesting season for the western snowy plover.

Lastly, the light-footed Ridgway's rail nesting season is mid-March to the end of August,[9] which would also occur outside of pre-Airshow and Airshow activities.

Response to Comment 3-13

Refer to Master Response C for a discussion of the nesting season relative to the Airshow. The Airshow will occur outside of the nesting season for the California least tern, Belding's savannah

7 California Least Tern (Sterna antillarum browni) | U.S. Fish & Wildlife Service, accessed on April 23, 2025.

8 Microsoft Word - 2022 Bolsa Chica WSP Report.doc, accessed on April 23, 2025.

9 Light-footed Ridgway's rail, accessed on April 23, 2025.

sparrow, the light-footed Ridgway's rail, and many other avian species. No Airshow activities would occur between January 1 and September 15, as requested by the commentor's proposed Mitigation Measure #1.

Because the Airshow will occur outside of the nesting season, there is no need for Recommendation #3 or Mitigation Measure #4, both of which request compensatory mitigation.

Refer to Master Response D for a discussion of the monitoring efforts, which address the commentor's measures in Mitigation Measure #2 and Mitigation Measure #3.

Response to Comment 3-14

Refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. Also refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events. Refer to Response to Comment 2-19 for a discussion of the use of streamers.

Response to Comment 3-15

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events. Also, while the commentor provides conclusions about potential bird behavior resulting from operation of the Airshow, the biological monitoring conducted during the 2023 Airshow did not detect evidence of disrupted bird behavior.

With respect to Recommendation #4 (regarding flyover impacts), Recommendation #6 (Participant Education), and Recommendation #7 (Flight over BCER), refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. Refer also to Master Response D for a discussion of the additional biological monitoring efforts, beyond those already conducted for the 2023 Airshow, that will be conducted for future Airshows to further ensure that impacts to sensitive species would be avoided or reduced.

With respect to proposed Mitigation Measure #8, there is no potentially significant impact for which mitigation is required.

Response to Comment 3-16

As noted in Chapter 2, *Project Description*, on pages 2-6 and 2-7, of the Draft EIR, "Future Airshows are anticipated to be held annually for three (3) days to up to five (5) days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The Draft EIR acknowledges flight rehearsals leading up to the Airshow.

Response to Comment 3-17

Section 3.2, *Biological Resources*, pages 3.2-40 and 3.2-41 of the Draft EIR fully addresses potential bird strike impacts, saying, in part:

> *Above ground, flights associated with the Airshow could result in bird strikes. According to a 2006 study, the majority of bird strikes (74 percent) occur within 500 feet above ground level (Dolbeer 2006). In addition, the FAA reported that 70 percent of bird strikes from 1990 to 2022 occurred at 500 feet above ground level (FAA 2023). The majority of the flights planned for the Airshow are expected to fly 500 to 1,000 feet above MSL and would only occur during the Airshow hours (historically between 10:00 AM and 5:00 PM) and at nighttime, when bird activity is lower.*

Response to Comment 3-18

Refer to Master Response D for a discussion of the biological monitoring efforts, beyond those already conducted for the 2023 Airshow, that will be conducted for future Airshows to further ensure that impacts to sensitive species would be avoided or reduced.

Response to Comment 3-19

The Project's MMRP includes all identified mitigation measures, as required by CEQA, and also voluntarily includes certain Project Description features to demonstrate enforceability.

Response to Comment 3-20

Refer to Master Response D for a discussion of the biological monitoring efforts, beyond those already conducted for the 2023 Airshow, that will be conducted for future Airshows to further ensure that impacts to sensitive species would be avoided or reduced.

Response to Comment 3-21

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR. However, any appropriate environmental filing fees will be submitted upon filing of the Notice of Determination by the City of Huntington Beach.

Response to Comment 3-22

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 3-23

Refer to Response to Comments 3-11, 3-13, 3-14, and 3-15 for a discussion of proposed Recommendations #1 through #4 and suggested mitigation measures #1 through #8.

California Department of Transportation

DISTRICT 12
1750 East 4th Street, Suite 100 | SANTA ANA, CA 92705
(657) 328-6000 | FAX (657) 328-6522 TTY 711
https://dot.ca.gov/caltrans-near-me/district-12

March 27, 2025

Mr. Connor Hyland
City of Huntington Beach
2000 Main Street
Huntington Beach, CA 90860

File: LDR/CEQA
SCH#2024020006
LDR LOG #2024-02750
SR-1

Dear Mr. Hyland,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project. The underlying purpose of the Project is to provide a spectacle-scale airshow in Huntington Beach that attracts attendees throughout the Southern California area (and perhaps beyond) and features civilian and military aircraft flybys and aerial acrobatics, air racing, helicopter landing/runway displays comprised of temporary acrylonitrile butadiene styrene (ABS) foundation (stadium flooring) rubber tracks, or wood or aluminum flooring, electric vehicle (EV) and drone displays with hangars and aerial competitions and drone shows, and displays of other emerging aviation/mobility technology, and visitor-serving entertainment, services, and amenities (e.g. Variety of viewing areas, vehicle and aircraft demonstrations and displays, illustrations, flight simulations, merchandise tents, concessions, food trucks, live music entertainment, wave pool surf competitions, skateboard and bicycle motocross (BMX) bowl competitions, sandcastle building competitions, art installations, and pyrotechnic shows). The approximate boundaries of the Show Center Area from northwest to southeast are 7th Street and Pacific Coast Highway (State Route 1 or SR-1) to Beach Boulevard (State Route 39 or SR-39) and Pacific Coast Highway to the Pacific Ocean including a portion of the Huntington Beach Pier landward. 4-1

The mission of Caltrans is Improving lives and communities through transportation. Caltrans is a responsible agency on this project and has the following comments: 4-2

1. Continue to coordinate with neighboring jurisdictions that may be impacted with increases of vehicles along PCH and surrounding streets. Consider implementing temporary transit services such as shuttles and/or microtransit services to reduce VMT and potential impacts to air quality. 4-3

2. Coordinate with the appropriate transit operators to encourage the use of rail services and consider the first and last mile connection by providing temporary transit services directly to the event. 4-4

3. For any lane closures, traffic control sign placement, or activities occurring within State Right of Way, please submit an encroachment permit application package (EPAP) to the D12 Permit's Inbox at D12.Permits@dot.ca.gov as early as possible to avoid delays. EPAP should include application, PE signed and stamped site-specific traffic control plan, insurance, letter of authorizations as needed, and any other relevant documents. Traffic control plan should include any necessary detour plans and increased crossing guards for pedestrian crossings. If there is a proposed full lane closure of Pacific Coast Highway, liability insurance will be required, and this section would then be considered part of the event site, which requires increased police presence for crowd management. It should be noted that sidewalk vendors and alcohol consumption are not allowed with State Right of Way. Per submitted DEIR, flight activities are to be done outside of State Right of Way. If there are any changes and flight activities are proposed within State R/W, City shall comply with all requirements of Encroachment Permit Manual Section 516.9 Unmanned Aircraft Systems (UAS) and Caltrans UAS Handbook. 4-5

Please continue to coordinate with Caltrans for any future developments that could potentially impact State transportation facilities. If you have any questions, please do not hesitate to contact Maryam Molavi, at Maryam.Molavi@dot.ca.gov. 4-6

Sincerely,

Scott Shelley (Mar 27, 2025 17:05 PDT)

Scott Shelley
Branch Chief – Local Development Review/Climate Change/Transit Grants
District 12

PacificAir Show- HB- DEIR #2024-02750 .Cmnt.Ltr.MM

Final Audit Report 2025-03-28

Created:	2025-03-28
By:	Maryam Molavi (s111882@dot.ca.gov)
Status:	Signed
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Comment Letter 4: California Department of Transportation

Response to Comment 4-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 4-2

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 4-3

The Applicant and City will continue to coordinate as applicable with neighboring jurisdictions that may be impacted with increases of vehicles along Pacific Coast Highway and surrounding streets. At this time, the Applicant and City are not considering implementing temporary transit services such as shuttles and/or microtransit. The Airshow typically utilizes approximately 500 parking spaces for production and staging of equipment beginning with the first day of setup and the last day of tear down. The use of parking is far less than other major events of this size and scale. Due to the vast availability of parking within the City of Huntington Beach and Huntington State Beach, including approximately 6,200 parking spaces in the immediate Project vicinity, this use of parking (approximately 8 percent of total available public access parking) has not had a significant impact on access and is not anticipated to have any future impacts. In addition, patrons arriving by vehicle are permitted to park within the Huntington Beach public parking areas, where the Applicant coordinates with the City to reserve parking spaces dedicated to Airshow attendees. All other details regarding parking will be governed by a future agreement between the City and the Applicant

Response to Comment 4-4

Rail services within the Project Area do not exist. The primary vehicular travel corridors to access the Show Center Area are from Interstate 405 (I-405) to either Beach Boulevard, Magnolia Street, Brookhurst Street, or Goldenwest Street; State Route 55 (SR-55) to Pacific Coast Highway; or Seal Beach Boulevard to Pacific Coast Highway. Also, refer to Response to Comment 4-3.

Response to Comment 4-5

Based on previous Airshows, temporary changes to vehicular ingress and egress of the Airshow area are anticipated to result from the following restrictions: establishment of a staging area for emergency response personnel between the 200-300 block of southbound 1st Street; installation of staging equipment for the Airshow on Main Street between Walnut Avenue and Pacific Coast Highway; and temporary use of an auxiliary lane to facilitate exiting vehicles from the public parking lots on southbound Pacific Coast Highway approximately 300 feet before the intersection at Beach Boulevard. Future Airshows do not propose substantial or permanent changes to the existing circulation elements, or temporary road closures, which would affect transit vehicles,

automobiles, bicycles, or pedestrians beyond what has occurred for historic Airshows. For potential traffic control sign placement or activities occurring within the State right-of-way, the Applicant will submit an encroachment permit application package.

Response to Comment 4-6

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

City of Seal Beach

CITY HALL 211 EIGHTH STREET
SEAL BEACH, CALIFORNIA 90740
(562) 431-2527 • www.sealbeachca.gov

Comment Letter 5

By USPS & Electronic Mail

March 28, 2025

Connor Hyland, Deputy City Attorney
City of Huntington Beach
2000 Main Street, 4th Floor
Huntington Beach, CA 92648

Re: EQCB Comments for the Draft Environmental Impact Report (DEIR) for the Pacific Airshow Huntington Beach Project (SCH#2024020006)

Dear Mr. Hyland:

The City of Seal Beach Environmental Quality Control Board (EQCB) convened on Wednesday, March 19, 2025, at 6:15 p.m. to review and discuss the DEIR for the Pacific Airshow Huntington Beach Project (Project). During this EQCB meeting, public comments were offered and the EQCB examined the contents of the DEIR. At the meeting, the Board members expressed enthusiasm and support for continuing the Huntington Beach Airshow. Below please find a series of comments from the EQCB, seeking clarification on the topics as described. These comments represent the input of the EQCB as agreed to by a motion of the Board, and are not representative of the City Council nor community at large. 5-1

- **Unclear Project Description**: Project description should include a better-defined Project area, including flight paths, what will be involved in the flights, what is landing on the beach, and more information on the itinerary of events for each individual day. Please clarify the definition of pyrotechnics. 5-2
- **Noise Impacts**: Please clarify noise impacts, especially as they relate to noise impacts in the evening up to 11:00 p.m. in relation to flights. What are the mitigations for night noise impacts for flights and what are proposed mitigations for flight noise? 5-3
- **Extension of the Event**: Please clarify impacts related to the extension of the event to five days, as it impacts people during the work and school week with Wednesday and Thursday proposed to be included. Please consider how expanding the event creates additional environmental impacts such as within Bolsa Chica as well as other biological impacts of concern. Also, consider impacts to pets during that extended time period. 5-4
- **Bolsa Chica**: Consider the impacts and mitigation to Bolsa Chica. 5-5
- **Alternative**: Reconsider “Alternative 2” as it meets most of the objectives and continues the airshow in how it has been conducted within recent years. 5-6
- **Biological Monitoring**: If there are going to be take-offs and landings from the beach, there should be a biological monitor to help mitigate potential bird strikes. 5-7
- **Streamer Mitigation**: Please assess the impacts and provide mitigation for use of streamers. 5-8

Thank you for the opportunity to provide comments on the DEIR for the City of Huntington Beach's consideration. For reference, the entire EQCB discussion may be viewed at https://www.youtube.com/watch?v=T5RZJiFW4RI. 5-9

Sincerely,

The Seal Beach Environmental Quality Control Board

Cc: Chair and Board Members of the Seal Beach EQCB
Mayor and Councilmembers of the City of Seal Beach
Patrick Gallegos, Interim City Manager
Iris Lee, Public Works Director
Alexa Smittle, Community Development Director

Comment Letter 5: City of Seal Beach

Response to Comment 5-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 5-2

As described in the Chapter 2, *Project Description*, Section 2.1, Project Location, page 2-1, of the Draft EIR, the Airshow Performance Area, the primary area for civilian and military aircraft flybys and aerial acrobatics, is located adjacent to the Show Center Area over the Pacific Ocean with an east-west length of approximately 3,000 feet from the shoreline and a north-south length of approximately 12,000 feet. A majority of the civilian and military aircraft flybys and aerial acrobatics occur within approximately 500 and 1,500 feet from the shoreline. However, many of the aircraft maneuvers, particularly for the military, spill out into the TFR airspace controlled by the Airshow. The TFR, as issued by the FAA for the Airshow, is a five nautical mile (NM) ring centered on the center of the Airshow's aerobatic box. The restricted airspace within the ring extends from the surface to 15,000 feet above MSL. Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Also described in Chapter 2, *Project Description*, page 2-8, of the Draft EIR, helicopter and smaller civilian aircraft will be landing on a helicopter and aircraft landing/runway display (approximately 4,500-foot-long by 40-foot-wide) on a temporary landing surface to be generally located within an open area on the beach directly in front of the Main Hospitality Area (Area D) during the hours of the Airshow.

As described in Chapter 2, *Project Description*, page 2-9, of the Draft EIR, pyrotechnic daily shows could be discharged from either aircraft or discharged from the Huntington Beach Pier or an ocean barge during the days and hours of the Airshow. Further, pyrotechnic nightly shows could be discharged from either aircraft (nighttime flyovers) or discharged from the Huntington Beach Pier or an ocean barge concluding by 11:00 PM each evening of the Airshow. Fireworks and pyrotechnics are addressed in Appendix B, *Initial Study* (see Section XIII, Noise, pages 3-44 and 3-45).

As discussed in Chapter 2, *Project Description*, page 2-9, of the Draft EIR, from prior years, typically each day the Airshow begins around 10:00 AM with the MV-22 Osprey streamer drop,

then the Orange County Fire Authority (OCFA) water drop, followed by the Australian Anthem, Canadian Anthem, and the United States Anthem, and then followed by the U.S. Navy Leap Frog Parachute Team with American Flag banner tow. The official start of the Airshow is immediately after, at approximately 10:30 AM, when the below-mentioned Airshow civilian and military performers display aircraft flybys and aerial acrobatics in designated time slots with the final performer being the U.S. Air Force Thunderbirds or the U.S. Navy Blue Angels concluding by 5:00 PM. Aircraft flight familiarization and flight practice flyovers could potentially occur as early as 9:00 AM on Airshow event days. The Airshow performer schedule and the Airshow performers are subject to change each year for the Airshow.

Response to Comment 5-3

Aircraft operations during future Airshows may temporarily exceed established noise limits, including during nighttime hours, as authorized by a Noise Deviation Permit issued specifically for the event. This permit grants approval for temporary deviations from standard noise regulations to enable Airshow activities. Future events may feature nighttime demonstrations by advanced F-series fighter jets such as the F-15, F-18, and F-35.

Data collected during the 2023 Airshow indicates that noise levels could surpass the City's standard noise thresholds by as much as 50 decibels (dB). However, these elevated noise levels are expected to be brief and not sustained over long periods.

To mitigate the impact of nighttime aircraft noise on the surrounding community, event organizers have integrated several noise-reduction strategies into the Airshow’s planning. These include recommending aircraft adhere to predetermined flight paths that are carefully designed to avoid residential areas whenever possible and keeping aircraft operations over water to the greatest extent feasible, reducing noise exposure for inland areas further from the coast. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. . While the Applicant can influence the sequence and timing of each performer’s display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 5-4

Pages 2-6 and 2-7, as well as page 3.1-20, of the Draft EIR, disclose that prior Airshows have been held annually in the City for 3 days with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow and that the future Airshows associated with the Project are anticipated to be held annually for 3 days to up to 5 days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight

familiarization and flight practice flyovers also beginning as early as Monday of the week of the Airshow. Thus, both the prior Airshows and future Airshows under the Project include aircraft flight activity as early as Monday of the week of the Airshow.

The noise significance thresholds are based on equivalent (typically hourly) and daily noise metrics. The Draft EIR provides an appropriate level of noise analysis and disclosure that is required by CEQA.

Refer to Response to Comment 1-3 and 2-15 for a discussion on impacts related to the BCER and Master Response D for a discussion on biological monitoring.

Response to Comment 5-5

As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitude are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possess authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

As such, biological monitoring will be conducted each year as part of the Project, at least one day prior to the pre-Airshow activities as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and that no Airshow-related debris drifts into the sensitive ecological areas.

Impacts to the BCER are also discussed in Section 3.2, *Biological Resources*, under 3.2.5.1 Special-Status Species, pages 3.2-39 through 3.2-41, and was determined to not significantly contribute to impacts to special-status birds, including nesting areas, due to the existing conditions of numerous daily flights by commercial and private aircraft and helicopter activity from which flights regularly operate over the BCER.

Refer to Response to Comment 1-3 and 2-15 for a discussion on impacts related to the BCER, Master Response A for a discussion on how flights are determined, and Master Response D for a discussion on biological monitoring. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 5-6

As described in Chapter 4, *Alternatives*, page 4-10, the 2023 Airshow Alternative (Alternative 2) would result in the fewest environmental impacts as compared to the Project and is considered the Environmentally Superior Alternative. However, this alternative would not meet all of the Project Objectives. Furthermore, the 2023 Airshow Alternative would reduce the opportunity to gather since fewer events would be held over fewer days.

The 2023 Airshow Alternative would not meet the following Project objectives in their entirety or to the extent the Project would:

- Continue to provide a family-oriented, safe, educational, fun, and entertaining Airshow experience with an emphasis on outdoor lifestyle and popular culture elements.
- Continue to provide a gathering place where locals and visitors can come together to enjoy civilian and military aircraft flybys and aerial acrobatics, illustrations, displays, food, and music.
- Create a net positive direct economic impact on the City and surrounding communities as a result of spending by incremental visiting attendees, the event organizer, and event sponsors.
- Increase in tax revenues (i.e., sales tax and transit occupancy tax) to the City.
- Continue to provide temporary and full-time jobs associated with the Airshow.

Since the 2023 Airshow Alternative would not include a music festival, helicopter and aircraft runway/display, skateboard/BMX competition, pyrotechnic shows, sandcastle building competition, and beach camping, among other activities/features, fewer family-oriented events would be offered. With fewer activities, it is anticipated that the positive economic impact, the potential tax revenues, and the number of employees needed to staff the Airshow would each potentially be reduced. In addition, without offering the events promoting the beach community, including beach camping and sandcastle building among others, there would be a reduced positive impact to the promotion of the Huntington Beach Pier and beaches.

Response to Comment 5-7

Biological monitoring is being implemented during take-offs and landings under Mitigation Measure HAZ-2 in Section 3.3, *Hazards and Hazardous Materials*, page 3.3-12, of the Draft EIR. Also, refer to Master Response D for a discussion on biological monitoring.

Response to Comment 5-8

Refer to Response to Comment 2-19.

Response to Comment 5-9

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Bolsa Chica Conservancy

Educate • Restore • Inspire

Dear Mr. Hyland:

The Bolsa Chica Conservancy (BCC) is a non-profit organization whose mission is to provide services that inspire and connect all generations through community involvement and leadership in hands-on restoration and education in wetland science, watersheds, coastal ecology, and environmental sustainability. These efforts are focused on the Bolsa Chica Ecological Reserve (BCER), the largest coastal wetland in the Huntington Beach area and a gem of our state, region and city.

We have read the NOP for the Pacific Airshow Huntington Beach, although we do not object to the airshow and the benefit to our community we submit the following comments. 6-1

(1) We are concerned that the noise and vibrations associated with aircraft flying at low elevations over BCER could harm the wildlife species that are so iconic and important to the wetland ecosystem and the surrounding community. BCER is located north of the "Project Area" shown in the NOP yet it has experienced impacts in the past with significant noise impact on wildlife. 6-2

(2) The NOP acknowledges the need for an EIR to examine impacts but does not appear to include areas that are not immediately adjacent to the project area. Thus, the EIR as proposed would not include impacts to BCER. 6-3

(3) We would like to see additional discussion of mitigation measures, including avoiding the nesting season at BCER avoiding flights at low elevations over BCER, that prioritize minimizing noise and vibration in BCER during the Pacific Airshow. The US Fish and Wildlife Service as well as CA Department of Fish and Wildlife can provide many resources about such mitigation mechanisms that align with Federal Aviation Administration guidelines. 6-4

Thus, we feel the potential impacts to the Bolsa Chica Ecological Reserve should be considered in the EIR with mitigation measures spelled out to avoid them. The Bolsa Chica Conservancy supports the expertise of the regulatory agencies, landowners, and managers to determine what is best for the reserve. 6-5

Sincerely,

Bob Hoxsie

Board Chair, Bolsa Chica Conservancy

714-846-1114 info@bolsachica.org
3842 Warner Ave. www.bolsachica.org
Huntington Beach, CA 92649
Tax ID: 33-0392527

Comment Letter 6: Bolsa Chica Conservancy

Response to Comment 6-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 6-2

The comment noted that the BCER has experienced impacts in the past regarding significant noise impacts on wildlife, but no documentation or specific examples were provided. Impacts related to the Airshow activities are not anticipated to result in insignificant indirect effects to BCER or marine wildlife. Studies have demonstrated that while noise levels may increase during the Airshow, the affected areas are relatively small and unlikely to disrupt local or regional wildlife movement. Refer to Appendix D, *Biological Resources Technical Report*.

Additionally, biological monitoring and surveys have been conducted prior to and during the 2023 Airshow to identify potential impacts on bird behavior and to ensure no Airshow-related debris affects BCER or other sensitive ecological areas. Refer to Appendix D, *Biological Resources Technical Report*.

Refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. Also refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 6-3

The Project area examines impacts along the proposed flight path and a 500-foot buffer to encompass potential changes based on weather conditions, flight traffic, and other safety factors considered by air traffic controllers which includes portions of the BCER. Biological monitoring and surveys have been conducted prior to and during the 2023 Airshow to identify potential impacts on bird behavior and to ensure no Airshow-related debris affects BCER or other sensitive ecological areas refer to Appendix D, *Biological Resources Technical Report*. Therefore, the Draft EIR addresses impacts to BCER regarding biological resources and noise.

Response to Comment 6-4

For a discussion on nesting season, refer to Master Response C. For a discussion on mitigation, refer to Response to Comment 2-15.

As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant

nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Because pilots could be instructed by the ATC to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project for one day prior to the start any pre-airshow activities (i.e., aircraft flight familiarization and flight practice flyovers) and for every day of pre-airshow activities and Airshow activities to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas.

Aircraft noise impacts related to the Airshow activities, including fighter jets performance maneuvers, are not anticipated to result in significant indirect effects to BCER or marine wildlife. Studies have demonstrated that while noise levels may increase during the Airshow, the affected areas are relatively small and unlikely to disrupt local or regional wildlife movement. Refer to Appendix D, *Biological Resources Technical Report*.

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 6-5

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Comment Letter 7

AMIGOS de BOLSA CHICA

P.O. Box 1563
Huntington Beach, CA 92647
714-840-1575
info@amigosdebolsachica.org
www.amigosdebolsachica.org

March 31, 2025

City of Huntington Beach
Department of Community Development
Attn: Connor Hyland, Senior Deputy City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Via email: connor.hyland@surfcity-hb.org

Re: Response to Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project, SCH # 2024020006

Dear City of Huntington Beach:

Amigos de Bolsa Chica is a long-standing organization based in Huntington Beach dedicated to the protection of the Bolsa Chica Ecological Reserve (BCER). We have reviewed the Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project. Here are our comments: 7-1

The EIR creates an arbitrary zone termed the Area of Biological Consideration and analyzes biological impacts of the airshow within this arbitrary area only. The boundaries of this area are such as to exclude most of the area of the BCER, despite the clear potential for impacts outside of the narrow zone of consideration. The EIR needs to be revised to consider impacts on a much greater geographic area and, at a minimum, the entirety of the BCER. 7-2

The EIR considers impacts of aircraft overflight during the actual airshow event only, typically three days in duration. The airshow aircraft practices for days in advance of the event and practice overflights impact wildlife. The EIR needs to consider the full period in which impacts can occur. 7-3

The airshow typically occurs during the autumn of the year. The impacts of airshow overflights would have significantly more damaging impacts on wildlife if the airshow were to be held during the avian breeding season (roughly March to September). The EIR needs to include a mitigation measure that explicitly precludes the breeding season from the range of dates within which the airshow may be held. 7-4

The EIR needs to include a mitigation measure that explicitly prohibits aircraft from flights over the BCER. 7-5

The draft EIR states that surveys and biological monitoring will be conducted as part of the Project, at least one day prior to the Airshow and during the operation of the Airshow to confirm if Airshow activity is impacting bird behavior. The EIR must describe the required monitoring protocols. 7-6

In its analysis of the potential noise impacts on birds, a study conducted in Alaska is cited as evidence of minimal impact. The draft EIR assumes that the Alaska experience and the impact on birds at BCER will be similar, without considering the significant differences in the bird populations in the two locations. The EIR should address the impact potential noise may have on the birds present at the BCER. 7-7

The project described in the Draft EIR contemplates that the airshow will continue to be held annually for the next ten years. During that period, environmental conditions and knowledge will change. The EIR should contemplate a requirement for project review on a regular basis so that mitigation measures can be modified or added to meet future impacts. 7-8

Sincerely,



Mevin L. Nutter
President
Amigos de Bolsa Chica

Comment Letter 7: Amigos de Bolsa Chica

Response to Comment 7-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 7-2

The Project area examines impacts along the proposed flight paths and a 500-foot buffer to encompass potential changes based on weather conditions, flight traffic, and other safety factors considered by air traffic controllers which includes portions of the BCER. As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Studies have demonstrated that while noise levels may increase during the airshow, the affected areas are relatively small and unlikely to disrupt local or regional wildlife movement due to the existing conditions of numerous daily flights by commercial and private aircraft and helicopter activity from which flights regularly operate over the BCER. Refer to Appendix D, *Biological Resources Technical Report*.

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 7-3

The Draft EIR does consider the potential of the Airshow to extend up to five (5) days. Pages 2-6 and 2-7, of the Draft EIR, discloses that prior Airshows have been held annually in the City for 3 days with aircraft flight familiarization and flight practice flyovers beginning as early as Monday

of the week of the Airshow and that the future Airshows associated with the Project are anticipated to be held annually for 3 days to up to 5 days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers also beginning as early as Monday of the week of the Airshow. Thus, both the prior Airshows and future Airshows under the Project include aircraft flight activity as early as Monday of the week of the Airshow.

Response to Comment 7-4

For a discussion on nesting season, refer to Master Response C. For a discussion on biological monitoring, refer to Master Response D.

Response to Comment 7-5

As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

However, because pilots could be instructed by the ATC to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project for one day prior to the start of any pre-Airshow activities (i.e., aircraft flight familiarization and flight practice flyovers) and for every day of pre-airshow activities and Airshow activities to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas.

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. For a discussion of mitigation, refer to Response to Comment 2-15.

Response to Comment 7-6

For a discussion on biological monitoring, refer to Master Response D.

Response to Comment 7-7

The Air Force Civil Engineer Center (2019) reference was to examine the noise impacts from operations of similar aircraft and Airshow location. The paper does not address a comparison of avian species at each site but only the noise levels and how they are consistent with the proposed Airshow. Marine birds were mentioned because they react to in-air noise generally 10 dB higher, but the current Airshow indicates that the in-water noise would not be appreciably modified as there is not enough acoustic energy present at ground level. Therefore, no measurable affect will occur on marine species (including marine birds) or resources relative to increased noise as a result of increased jet fighter flight activity.

Response to Comment 7-8

The Draft EIR has prepared an environmental analysis for the Airshow that would include an event program for the continuation of the Airshow for up to ten (10) additional years beginning from year 2024 through 2034 as permitted by the City's Specific Event Permit Process. For each year of the Airshow, the Applicant will prepare, submit, and seek approval of the City's Specific Event Permit Application. No additional review is necessary.

Comment Letter 8

COASTAL CORRIDOR ALLIANCE

4/7/25

City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Attn : Connor Hyland, Senior Deputy City Attorney

Subject: Coastal Corridor Alliance Comments on the Draft Environmental Impact Report (EIR) for the Pacific Airshow Huntington Beach Project.

Mr. Hyland,

The Banning Ranch Conservancy (BRC) led the decades-long effort to protect and create a permanent public open space on the 400-acre Banning Ranch property. In December 2022, escrow closed on a conservation transaction, permanently protecting 387 acres of Banning Ranch. The $97 million real estate deal was negotiated and completed by The Trust for Public Land and made possible by an extremely generous private donation from Frank and Joan Randall. The title of the property was immediately transferred to the Mountains Recreation and Conservation Authority, a local Joint Powers Authority (JPA) that manages over 75,000 acres of parkland in Southern California. The property is now known as the Frank and Joan Randall Preserve (Randall Preserve).

8-1

In January 2024, BRC became the Coastal Corridor Alliance (CCA), with a new mission, “To protect biodiversity, foster community stewardship, and advocate for appropriate human access on the Randall Preserve and Santa Ana River Coastal Corridor.” The change in name and mission reflects our organization’s transformation into a stewardship role and indicates we have expanded our vision beyond Randall Preserve to include the properties of the Coastal Corridor from the Pacific Ocean up the Santa Ana River to Adams St. in Costa Mesa. This would also

8-2

include the Bolsa Chica mesa and wetlands and the Huntington Beach Wetlands Conservancy wetlands.

8-2 (cont.)

The CCA respectfully submits comments on the Pacific Airshow Huntington Beach Project. These comments have been prepared by biological consultant Robb Hamilton and are in a separate attached letter. We believe that these same comments by Robb Hamilton were submitted during the Notice of Preparation phase of the review last year (hence the date 4/4/24). Yet, there is no mention of Robb Hamilton's comments in the current dEIR. Therefore, Robb Hamilton's comments are being resubmitted for the City's responses.

8-3

Sincerely,



Terry Welsh, M.D.
President, Coastal Corridor Alliance

Comment Letter 8: Coastal Corridor Alliance

Response to Comment 8-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 8-2

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 8-3

In the Hamilton Biological comment letter dated March 4, 2024 (included in this Response to Comments document under Comment Letter 11), the commentor notes "On behalf of the Coastal Corridor Alliance, I provided these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project)." Accordingly, this Responses to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to Draft EIR, dated February 2025. For the evaluation of potential effects in nearby natural areas and the evaluation of potential effects of nocturnal activities, please refer to Section 3.2, *Biological Resources*, in the Draft EIR. Also, please refer to Master Response C regarding nesting season and Response to Comment 2-15 regarding biological monitoring. No further response is required.

Comment Letter 9

COSTA MESA FIRST
Working for a Livable City

April 7, 2025

VIA EMAIL ONLY – connor.hyland@surfcity-hb.org

Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, California 92648

Re: Pacific Airshow Huntington Beach Project; SCH No. 2024020006

Dear Mr. Hyland:

We appreciate the opportunity to provide comments to the City of Huntington Beach's Draft Environmental Impact Report ("DEIR") for the Pacific Airshow Huntington Beach Project ("Project") to be located in Huntington Beach, California.

Please note that Costa Mesa First sent a letter to you on March 4, 2024, in response to the Notice of Preparation ("NOP") for the Project. Our letter, along with the letters from Fairview Park Alliance, and Hamilton Biological on behalf of Coastal Corridor Alliance, were omitted from Appendix A of the DEIR and many of the requested topics to be contained in the DEIR were not covered in that document. Our letter, along with the letters from Fairview Park Alliance and Hamilton Biological are attached hereto as Attachments "A," "B," and "C," respectively. 9-1

Because of these omissions, the DEIR is deficient in many areas and requires revision. We are requesting that (1) our letter be included in the DEIR, (2) that the topics requested to be covered by the DEIR be analyzed and included in a revised document, and (3) the comment period be extended for interested parties to provide comments on the new information in the revised DEIR. We also request notification of the availability of any future documents associated with the Project. 9-2

Costa Mesa First (FPPC 1332564), P.O. Box 2282, Costa Mesa, CA 92628
costamesa1st@gmail.com
costamesa1st.com
(714) 549-5884

The boundaries of the Show Center Area (as defined by the outline on Figure 2-1 of the DEIR) from northwest to southeast are Seventh Street and Pacific Coast Highway to Beach Boulevard and from Pacific Coast Highway to the Pacific Ocean, including a portion of the Huntington Beach Pier landward of the State Lands Commission mean high tide line. We note that for purposes of a biological resources technical analysis, a broader biological study area ("BSA") was defined[1], which includes the Show Center Area where primary on-the-ground events and activities of the project event ("Airshow") takes place, but also extends beyond that area to reflect the potential impacts associated with civilian and military aircraft flybys and aerial acrobatics. The BSA does not, however, extend to Fairview Park, Talbert Regional Park or the Frank and Joan Randall Preserve (identified on all maps and depictions as "Banning Ranch," its former name).

The DEIR indicates that the Airshow Performance Area (as defined by the outline on Figure 2-3 of the DEIR), the primary area for civilian and military aircraft flybys and aerial acrobatics, would be located next to the Show Center Area and would extend over the Pacific Ocean with an east-west length of approximately 3,000 ft. from the shoreline and a north-south length of approximately 12,000 ft. A majority of the civilian and military aircraft flybys and aerial acrobatics would occur within approximately 500 ft. and 1,500 ft. from the shoreline. The Airshow Performance Area, or the aerobatic box, is identified by an unspecified number of large marker buoys placed in the ocean to identify this area. However, many of the aircraft maneuvers, particularly for the military, would spill out into the temporary flight restriction ("TFR") airspace controlled by the Airshow. The TFR, as issued by the Federal Aviation Administration for the Project, would be a five nautical mile ring centered on the center of the Airshow's aerobatic box. The restricted airspace within the ring extends from the surface to 15,000 ft. above mean sea level. The Show Center Area and Airshow Performance Area collectively comprise the project site ("Project Site").

9-3

The Airshow historically has been held annually in the Fall in the City for three (3) consecutive days (Friday through Sunday), with additional days of aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The approximate times the TFR is in effect during the week of the Airshow are typically Tuesday from 12:45 p.m. to 2:30 p.m., Friday from 9:30 a.m. to 5:00 p.m., Saturday from 10:00 a.m. to 5:00 p.m., and Sunday from 10:00 a.m. to 5:00 p.m. The hours of historic Airshow flights typically occurred between 10:00 a.m. and 5:00 p.m.; however, other Airshow-related activities have extended to as late as 10:00 p.m. Since 2021, nighttime flyovers have occurred in connection with the music festival that is part of the Airshow.

[1] Appendix D, Figure 2.

The Project expands future Airshow events in that they are anticipated to be held annually for three (3) days to up to five (5) days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The DEIR lists new Airshow activities that are anticipated to be added in 2024 that would likely extend the operation time to as late as 11:00 p.m. The DEIR indicates the expanded Airshow would continue for an additional ten (10) years beginning in 2024. 9-3 (cont.)

We are submitting the following comments for consideration by the City of Huntington Beach ("City"). The DEIR is deficient because it either fails to analyze, provide accurate analysis, or delays analysis of significant environmental impacts, making it impossible for the residents of impacted areas such as Huntington Beach, Newport Beach, Costa Mesa and other Orange County cities to understand and meaningfully consider the issues raised by the Project and any attempts by the City to mitigate significant environmental impacts associated with the Project. Additional accurate environmental review of the Project is required under CEQA. Further, we have serious concerns about the limited notice area preventing public input. The engagement of the residents of Newport Beach and Costa Mesa has been minimal, so much so that the requirement under CEQA to inform the public about the potential environmental effects of proposed activities and to prevent significant, avoidable environmental damage has largely been unmet. 9-4

1. <u>Project Alternative</u>.

The DEIR identifies the No Project Alternative as the environmentally preferred alternative, as it would avoid or reduce most of the potential impacts associated with operation of the Project. We understand that this does not meet the objectives of the Project, but the goals of the Project conflict with the City's fiduciary duty to protect the public and environment. No alternative site was listed in the DEIR. Given the impacts of the Project, we urge the City to pursue the No Alternative Project and work with the Airshow promoter to locate a better environmentally preferred location for the Airshow. Alternatively, the City needs to scale back the Project to avoid as many of the environmental impacts as possible. 9-5

2. <u>DEIR does not disclose that Project will violate the Public Trust Doctrine and impact Environmental Justice</u>.

The Project is of regional significance as it will impact not only Huntington Beach, but surrounding cities, many with disadvantaged communities. As noted above, the Show Center Area consists of the beach and the Huntington Beach Pier landward of the State Lands Commission mean high tide line, along with parking lots, commercial/restaurant uses, bicycle and walking trails along Pacific Coast Highway. It is an area with public access and recreational use that cannot be denied to the public during the Airshow and is subject to the Public Trust Doctrine. Environmental 9-6

Justice is the "fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Government Code § 65040.12). The Airshow denies the public access to these public areas for the duration of the event, therefore violating laws of Environmental Justice. 9-6 (cont.)

3. **The DEIR concludes that the Project would have significant and unavoidable impacts to air quality**.

The DEIR concludes that the Project would have significant and unavoidable impacts to air quality. For 2024, the DEIR lists calculated that the Project's daily operational air emissions of nitrogen oxides, carbon monoxide, and volatile organic compounds would drastically exceed the applicable CEQA significance thresholds in an air basin already in nonattainment for ozone standards and fine particulate matter standards.[2] We note that these are calculations and that, despite expanded operation of the Airshow in 2024, no actual study data was provided for the 2024 Airshow. 9-7

While the Airshow is temporary, the queuing of traffic to enter the event backs up onto Pacific Coast Highway. In addition, there is a queue of traffic to exit S-55 to Victoria Street in Costa Mesa. Those traffic problems have the potential to cause gridlock that could result in temporary CO^2 hotspots that may have an impact when combined with traffic on nonevent days. 9-8

4. **The DEIR concludes that the Project would have significant and unavoidable impacts on an adopted emergency evacuation plan**.

The DEIR concludes that the Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. "[I]t is clear that the addition of a significant number of people to the City on a typical Airshow day will result in longer evacuation times for those already in the area (residents and employees in particular).[3] The DEIR is deficient because it only analyzed the impact of the Project on Huntington Beach's emergency response plan or emergency evacuation plan. However, vehicles travelling to and from the Airshow use roadways and freeways in Costa Mesa and Newport Beach, causing traffic backup on those roadways and freeways, therefore, the impacts on the emergency response plans or emergency evacuation plans of those cities as well. 9-9

[2] Appendix C of DEIR.
[3] Page 3-34 (Section 3.3) of DEIR.

5. <u>The DEIR concludes that the Project will result in significant noise impacts</u>.

The DEIR concludes that the Project will result in a significant impact if it generates excessive groundborne vibration or groundborne noise levels. It also concludes that the Project would result in a significant impact if it would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.[4]

In addition, the DEIR states "[t]he noise levels from aircraft flyovers during the 2023 Airshow exceeded the maximum noise level criteria outlined in Table 3.4-3. L_{max} exceedances ranged from 1.3 dB to 50.1 dB over the various aircraft performances. Noise levels from aircraft flyovers for the duration of the Airshow would generate a substantial temporary increase in ambient noise levels and thus result in a significant impact." However, the City's Municipal Code includes provisions for approval of a Noise Deviation Permit to allow the Airshow promoter to be exempt from its ordinance. 9-10

Of the six locations that were monitored for noise during the 2023 Airshow, none of the noise measurement areas are within the city boundaries of Newport Beach or Costa Mesa, despite those cities being located within the TFR. Therefore, the DEIR does not take into consideration noise standards for those jurisdictions. We note that despite expanded operation of the Airshow in 2024, no actual study data was provided for the 2024 Airshow.

6. <u>Wildlife surveys must be done prior to Project approval; City has not analyzed the whole of Project</u>.

Under CEQA, the City must analyze the Project's impacts, which include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonable foreseeable indirect physical change in the environment." Please refer to CEQA Guideline Section 15378; *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1220. This standard is consistent with the principle that "environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences." *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal3d 376, 396. 9-11

The DEIR states "[t]The geographic area for evaluating the Project's cumulative impacts for biological resources is the Show Center Area and the Bolsa Chica Ecological Reserve (BCER). The Project analysis concludes that there would be a potential for impacts to special-status species 9-12

[4] Page 3.4-21(Section 3.4.6.1) of DEIR.

and wildlife movement corridors. Although no suitable habitat for special-status species occurs within the Show Center Area, and no impacts to special-status species within the Show Center Area would occur, there is a low potential for special-status species within the BCER to be impacted."[5] However, the DEIR does not provide any studies to support this claim.

As noted above, the Project includes the TFR airspace ring of five nautical miles for maneuvers by the Airshow aircraft. These flyovers are beyond the Airshow acrobatic box and will have significant impacts on wildlife preserves and natural open space under the TFR airspace, including the Frank and Joan Randall Preserve, Fairview Park and Talbert Regional Park.

The DEIR does not provide any information about the potential impacts to protected and endangered species in the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park. Fairview Park, like most of Costa Mesa, sits on a blufftop overlooking the lowlands of Huntington Beach. Because it is nearly 100 feet above sea level, the noise and vibration from jets travelling in the TFR over Fairview Park is more intense than the area in Huntington Beach below it. Bird displacement in Fairview Park has been observed during the past Airshows. The DEIR does not analyze the Project's foreseeable indirect impacts. The BSA needs to be expanded to include the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park due to the environmentally sensitive habitat and species that exist in those parks, and the fact that aircraft participating in the Airshow fly over those parks. Surveys of the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park must be done as part of the DEIR and include all pertinent seasons, including migration season. By cutting short the environmental analysis prior to approval of the Project, the City violates CEQA and makes new, accurate analysis of the Project necessary after approval. It is impermissible to delay studies and offer some vague suggestion of mitigation measures, such as suggestions to alter flight patterns[6], that might occur at some date after the approval the Project.

In addition, a comment letter from the U.S. Department of Fish and Wildlife must be solicited.

9-12 (cont.)

7. <u>The DEIR fails to appropriately analyze and disclose all significant environmental impacts</u>.

The purpose of CEQA is to ensure that a lead agency fully evaluates, discloses, and, whenever feasible, mitigates a project's significant environmental effects.[7] An EIR serves as an "informational document" that informs the public and decisionmakers of the significant

9-13

[5] Page 3.7-8 (Section 3.7.1.2) of DEIR.
[6] *Ibid*.
[7] Public Resources Code, § 21000-21002.1.

environmental effects of a project and ways in which those effects can be minimized.[8] Accordingly, an EIR must clearly set forth all significant effects of a project on the environment.[9] In this case, the DEIR fails to properly analyze and/or disclose the significant air quality, noise, and transportation impacts of the Project. As noted above, it also does not include several scoping letters that were sent to the City in response to the NOP. 9-13 (cont.)

A. **Air Quality**. As stated above, the DEIR concludes that the Project would have significant and unavoidable impacts to air quality. The DEIR states "potential impacts related to conflict with or obstruction of air quality plans, exposing sensitive receptors to substantial pollutant concentrations, and resulting in other emissions (such as those leading to odors) adversely affecting a substantial number of people were found to have a less than significant impact and are not addressed further in this Draft EIR." However, the DEIR does not include impacts on sensitive receptors found in the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park because no air quality study was performed in those locations, despite their proximity to the Project and despite being located within the TFR. Further, the flight patterns and study areas depicted in the Biological Resources Technical Report[10] are inaccurate in that they do not reflect the entire and actual flight paths used during practice flyovers and Airshow performances in prior years. In addition, flight patterns for the 2024 Airshow have not been provided. 9-14

B. **Noise**. As stated above, the DEIR concludes that the Project will result in a significant impact if it generates excessive groundborne vibration or groundborne noise levels. It also concludes that the Project would result in a significant impact if it would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

It is important to note that no noise study has ever been completed outside of the boundaries of the City. The Project Site is not near public schools, but the flights associated with the Airshow are over sensitive noise receptors and land uses, such as public/private schools and places of worship, and the noise and vibration from military aircraft interrupts the quiet that should be enjoyed by those under the flight paths. The DEIR is deficient in that it does not contain noise and vibration studies for areas outside of the City boundaries that are impacted by the noise and vibration originating from the Airshow. Noise associated with amplified sound, crowd noise and aircraft used in the Airshow could disrupt and displace wildlife, including protected and endangered species, in the Frank and Joan 9-15

[8] CEQA Guidelines, § 15121, subdivision (a).
[9] Public Resources Code, § 21100, subdivision (b)(1); CEQA Guidelines, § 15126.2, subdivision (a).
[10] Figures 4a-4p of Appendix D of DEIR.

Randall Preserve, Fairview Park and Talbert Regional Park, all of which are located within the TFR. 9-15 (cont.)

C. **Transportation**. The DEIR states ". . . during the 2023 Airshow, there was a clear increase in inbound traffic volumes in the morning and outbound traffic volumes in the evening relative to a comparable Non-Airshow day. The magnitude of change was most noticeable in a concentrated 2-hour period, with a peak direction (AM inbound, PM outbound) of up to 15% on Friday and approximately 30% to 40% on Saturday/Sunday."[11] However, this data only relates to streets in the City and fails to include traffic data from Newport Beach and Costa Mesa, which also experience traffic impacts. 9-16

   In addition, the DEIR must disclose the proposed routes for construction traffic associated with the Project, and any alternative routes, so that the impacts of construction traffic and the effects on other environmental resources can be evaluated by agencies and members of the public.

D. **DEIR is deficient because it is missing information**. Please refer to the attached scoping letters from this organization, Fairview Park Alliance and Hamilton Biological that were sent to you before the deadline stated in the NOP (collectively, the "Letters"). The Letters list information that was requested to be included in the DEIR. We request (1) that the City revise the DEIR to include all the Letters in Appendix A to the DEIR, (2) that the topics requested in the Letters to be covered by the DEIR be analyzed and included in a revised document, and (3) the comment period be extended for interested parties to provide comments on the new information in the revised DEIR. 9-17

Any additional information and analyses included as a result of revising the DEIR should include all feasible mitigation measures considered in association with impacts. 9-18

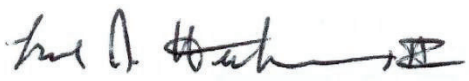
[11] Page 3.5-8 (Section 3.5.1.1) of DEIR.

8. <u>Conclusion</u>.

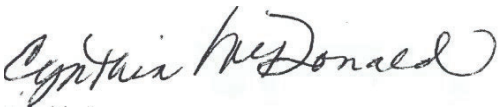
CEQA promotes public health and thoughtful governance by requiring evaluation, public disclosure, and mitigation of a project's significant adverse environmental impacts before that project's approval. We urge the City to include the information requested above in the DEIR, that the report be recirculated for comment, and additional meetings with the public be held so as to conform with CEQA. Alternatively, we request that the City reject further consideration of the Project for the site of the Airshow and work with the promoter to determine a less impactful location. 9-19

Thank you for your attention. Please feel free to contact us should you have any questions.

Very truly yours,



Richard J. Huffman Treasurer



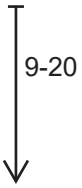
Cynthia McDonald Assistant Treasurer

cc: State of California, State Clearing House
California Assembly Member Cottie Petrie-Norris
County of Orange Supervisor Katrina Foley
City of Costa Mesa—Mayor, City Council and City Manager
City of Newport Beach—City Council and City Manager

Costa Mesa First's mission is to educate Costa Mesans about planning policies in Costa Mesa so they make knowledgeable choices when voting. We encourage residents to choose walkable, bikeable, and inclusive neighborhoods, and the land use and transportation policies and investments needed to make Costa Mesa flourish. Our primary objective is to require Costa Mesa's leaders to put the residents of Costa Mesa first.

Attachment A

Letter dated March 4, 2024, to City from Costa Mesa First



COSTA MESA FIRST

Working for a Livable City

March 4, 2024

VIA EMAIL – connor.hyland@surfcity-hb.org

Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Re: Pacific Airshow Huntington Beach Project

9-20 (cont.)

Dear Mr. Hyland:

Thank you for the opportunity to provide comments on the preparation of an Environmental Impact Report for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project") to be located in Huntington Beach, California.

The approximate boundaries of the Show Center Area (as defined by the outline on Figure 2 of the Notice of Preparation ("NOP")) from northwest to southeast would be Seventh Street and Pacific Coast Highway to Beach Boulevard and from Pacific Coast Highway to the Pacific Ocean, including a portion of the Huntington Beach Pier landward of the State Lands Commission mean high tide line. The NOP indicates that the Airshow Performance Area (as defined by the outline on Figure 3 of the NOP), the primary area for civilian and military aircraft flybys and aerial acrobatics, would be located next to the Show Center Area and would extend over the Pacific Ocean with an east-west length of approximately 3,000 ft. from the shoreline and a north-south length of approximately 12,000 ft. A majority of the civilian and military aircraft flybys and aerial acrobatics would occur within approximately 500 ft. and 1,500 ft. from the shoreline. The Airshow Performance Area, or the aerobatic box, is identified by 16 buoys placed in the ocean that identify this area. However, many of the aircraft maneuvers, particularly for the military, would spill out into the temporary flight restriction ("TFR") airspace controlled by the Airshow. The TFR, as issued by the Federal Aviation Administration for the Project, would be a five nautical mile ring centered on the center of the Airshow's aerobatic box. The

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restricted airspace within the ring extends from the surface to 15,000 ft. above mean sea level. The Show Center Area and Airshow Performance Area collectively comprise the project site ("Project Site"). However, the NOP indicates that, for the purposes of the technical analysis within the draft Environmental Impact Report ("EIR"), a broader study area may be defined that extends beyond the Project Site to reflect the potential impacts associated with civilian and military aircraft flybys and aerial acrobatics traveling to/from the Airshow Performance Area.

The Project Site is approximately 8,700 ft. from the Frank and Joanne Randall Preserve (which is across the Santa River from the Huntington Beach Wetlands), 10,000 ft. from Talbert Regional Park, and 11,500 ft. from Fairview Park, all of which are nature parks in or adjacent to Newport Beach or Costa Mesa that contain environmentally sensitive species and habitat areas. In addition, all of these areas are within the TFR. We are submitting the following comments for consideration by the City of Huntington Beach (the "City") as it prepares the EIR:

1. **The Project Site**. As noted above, the Show Center Area consists of the beach and the Huntington Beach Pier landward of the State Lands Commission mean high tide line, along with parking lots, commercial/restaurant uses, bicycle and walking trails along Pacific Coast Highway. This is an area with public access and recreational use that cannot be denied to the public during the Project event ("Airshow), as it is subject to the Public Trust Doctrine.

2. **Airshow Expansion**. The Airshow historically has been held annually in the Fall in the City for three (3) consecutive days (Friday through Sunday), with additional days of aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The approximate times the TFR is in effect during the week of the Airshow are typically Tuesday from 12:45 p.m. to 2:30 p.m., Friday from 9:30 a.m. to 5:00 p.m., Saturday from 10:00 a.m. to 5:00 p.m., and Sunday from 10:00 a.m. to 5:00 p.m. The hours of historic Airshow flights typically occurred between 10:00 a.m. and 5:00 p.m.; however, other Airshow-related activities have extended to as late as 10:00 p.m. Since 2021, nighttime flyovers have occurred in connection with the music festival that is part of the Airshow.

   Future Airshow events are anticipated to be held annually for three (3) days to up to five (5) days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The NOP and Initial Study have lists of new Airshow activities that are anticipated to be added in 2024 that would likely extend the operation time to as late as 11:00 p.m. The NOP indicates the expanded Airshow would continue for an additional ten (10) years beginning in 2024.

9-20 (cont.)

The expansion of the Project may have a substantial, or potentially substantial, adverse change to the physical conditions within the area affected by the Project, including but not limited to land, air, water, minerals, flora, fauna, ambient noise, objects of historic or aesthetic significance, and social or economic change is related to a physical change. The EIR must address these changes and provide mitigation measures to be taken to alleviate the impact of the changes to the physical conditions within the area affected by the Project.

3. **Public Access and Parking.** The Airshow is a regional destination designed to require that spectators and concert attendees travel mostly by motor vehicle, therefore impacting surrounding cities with traffic. The primary vehicular travel corridors to access the Show Center Area are from I-405 to either Beach Boulevard, Magnolia Street, Brookhurst Street, or Goldenwest Street; SR-55 to Victoria Street in Costa Mesa to Pacific Coast Highway; or Seal Beach Boulevard to Pacific Coast Highway. While changes to vehicular ingress and egress in the Airshow area are temporary, there are also impacts to traffic in adjacent cities, such as Costa Mesa and Newport Beach. Because this is a repeated event, traffic impact fees must be paid to surrounding cities cumulatively impacted by the Project event.

Further, the increased traffic will affect emergency response times in the event of a widespread disaster, or riot similar to the surf contest riots that required assistance from police departments from nearby cities to quell.

9-20 (cont.)

In 2023 and prior years, the operator of the Airshow constructed a sizeable private bleacher seating in the Show Center Area, resulting in denial to members of the public (i) to access the beach, (ii) the ability to cross the shoreline and access state tidelands seaward of the bleacher seating, and (iii) to access to the entirety of the Huntington Beach pier. In addition, access to the beach parking lots was denied to those not attending the event. Access to these areas was for the exclusive private use of ticket purchasers throughout the duration of the event.[1]

4. **Noise and Vibration Levels**. While the City's Noise Ordinance allows noise from temporary events to be exempt from the provisions of the Ordinance, it is important to note that no noise study has ever been completed outside of the boundaries of the City. The Project site is not near public schools, but the flights associated with the Airshow are oversensitive noise receptors and land uses, such as public/private schools and places of worship, and the noise and vibration from military aircraft interrupts the quiet that should be enjoyed by those under the flight paths. The EIR must contain noise and vibration studies extended outside of the City boundaries to those areas impacted by the noise and

[1] Source: Letter dated February 21, 2024, from California Coastal Commission to the City and the Air Show operator.

vibration originating from the Airshow. As discussed in more detail in Item 6 below, the noise associated with amplified sound, crowd noise and aircraft used in the Airshow could disrupt and displace wildlife.

5. **Air Quality**. While the Airshow is temporary, the queuing of traffic to enter the event backs up onto Pacific Coast Highway. In addition, there is a queue of traffic to exit S-55 to Victoria Street in Costa Mesa. Those traffic problems have the potential to cause gridlock that could result in a temporary CO^2 hotspot that may have an impact when combined with traffic on nonevent days. In addition, the unpermitted privatization of public land by the Airshow has resulted in extra vehicular miles being travelled by the public to access the areas adjacent to the Show Center Area and increased pollution associated therewith.

There will be the impact of the additional flights arriving and departing from the airports used to stage the flights. The fuel combusted by aircraft engines emits carbon dioxide, water vapor, nitrogen oxides, carbon monoxide, and soot. Nitrogen oxides emitted by aircraft contribute to climate change and are a pollutant in the lower atmosphere, but also destroy the stratospheric ozone layer at high altitudes.

As stated in the Initial Study, the Project may expose sensitive receptors to substantial pollutant concentrations due to its proximity to the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern, western snowy plover, California gnatcatcher, Ridgway's rail and Belding's savannah sparrow. The Frank and Joanne Randall Preserve, Fairview Park and Talbert Regional Park also have sensitive receptors that may be exposed to pollutant receptors and must be included in any air quality study performed in connection with the EIR.

9-20 (cont.)

6. **Impacts on Biological Resources**. As noted above, the proposed Project is near the Frank and Joanne Randall Preserve, Talbert Regional Park and Fairview Park, all of which contain environmentally sensitive species and habitat as documented by multiple studies, some of which can be found at https://www.costamesaca.gov/community/fairview-park/biological-reports. The Airshow occurs during migration season for many birds. The Frank and Joanne Randall Preserve, Talbert Regional Park, Fairview Park, the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, and the Magnolia Marsh have all been used by migratory birds and local wildlife as a wildlife corridor. Surveys of the surrounding areas for wildlife and ecologically sensitive habitat must be conducted and reports provided. The linkages or migration corridors between habitat areas must be preserved.

During the 2023 airshow, repeated low flyovers by the Airshow jet aircraft caused disruptions in normal behavior patterns of many bird species, including feeding and sheltering at the Bolsa Chica Ecological Reserve. The repeated low flyovers harassed the bird populations and caused them to take flight each time the airplanes flew over. This action is considered a "take" and is in violation of California Code of Regulations, title 14, section 251.1. Additionally, under sections 550, 630 (18), and 632 (121), (122) of title 14, no aircraft operations are permitted in a reserve, and low flyovers are in violation. The sound pollution and overhead flights pose a threat to birds and other wildlife. The areas noted above are critical stopovers along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C §§ 703-712). These also include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C §§ 1531-1544), and the California Endangered Species Act of 1970 (Fish & G. Code, Ch. 1.5, §§ 2050-2115.5).[2]

The Airshow may temporarily impact movement of native resident or migratory fish or wildlife species within the Project site because of noise, vibration and waste from combusted fuel associated with civilian and military aircraft flybys and aerial acrobatics, increased visitation by humans, amplified concert noise, nighttime light or glare, and the associated traffic and trash accumulation along the beaches. This increased presence could disrupt local movement and displace wildlife within the Project site and the other environmentally sensitive areas noted above. In addition, "bird strikes" by aircraft need to be evaluated both in terms of safety to birds and to aircraft and spectators. In addition, any aircraft accident in areas with environmentally sensitive species and habitat could cause ecological and human health and safety damage. As such, the impacts in these regards would be potentially significant and must be further evaluated in the EIR. The EIR should evaluate how the Project accomplishes or fails to implement the environmental goals, objectives, and policies of the Huntington Beach General Plan. 9-20 (cont.)

7. **The City Must Comprehensively Evaluate the Project's Environmental Impacts and Consider All Feasible Measures to Mitigate Potentially Significant Impacts**. The purpose of CEQA is to ensure that a project's lead agency fully evaluates, discloses, and mitigates (where feasible) significant environmental effects. An environmental impact report serves as the informational document that informs the public and decisionmakers of the significant environmental effects of a project and the ways in which those effects may be minimized. Projects of this type typically involve significant environmental impacts, so the EIR must contain sufficient detail for the residents of Huntington Beach

[2] Source: Letter dated February 20, 2024, from California State Lands Commission to the City and the Airshow operator.

and adjacent cities to understand and meaningfully consider the issues raised by the Project. This includes the following:

- Criteria for locating the Project at the Project Site
- List other sites considered
- Describe any anticipated substantial change to natural topography or other ground surface relief features through landform alteration
- Provide depictions of any blockage of public views from designated open space land areas, roads, or to any significant visual landmarks or scenic vistas that would result from the Project
- Provide details of plans to provide access to the public to beach parking, the pier, state waters and tidelands during the Airshow
- Describe any economic and social equity benefit programs, including programs to hire local residents for the Project
- Provide an analysis of the increase in vehicle trips and vehicle miles traveled as a result of the Project compared to the prior and existing Airshows that have occurred each year since 2016, excepting 2020; this analysis should include the impacts on the City and surrounding cities
- Identify and provide details of any proposed program to mitigate traffic impacts, including the unnecessary idling and queuing of vehicles, both in the City and surrounding cities
- Identify programs for mitigating greenhouse gases, including the use of zero-emissions technology, van pools, carpool incentives, bike share, no idling policy, etc.
- Describe any programs for mitigation of aircraft fuel and diesel particulate matter generated by the Project
- Provide details of any program requiring all stand-by emergency generators be powered by a non-diesel fuel
- Identify and provide details of any proposed alternative flight plans and alternative dates for the Airshow
- Provide an analysis of the impacts on air quality, water pollution, noise, and vibration levels created by additional flights arriving and departing from the airports used to stage flights
- Provide an evaluation of “bird strikes” by aircraft both in terms of safety to birds and to aircraft and spectators.
- Provide the location and description of any temporary transit and ride share stops, traffic control or traffic safety measures that will be required or provided as part of the Project

9-20 (cont.)

- Identify and describe in detail any emergency response plan that will be implemented in the event of a widespread disaster, or other event that requires assistance from police departments from nearby cities
- Describe any significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect
- List the cultural/tribal cultural resources that will be considered and any required mitigation
- Identify and address in detail the biological resources that will be considered/impacted as identified by a variety of sources, including but not limited to, the California Department of Fish and Game's California Natural Diversity Database, the California Native Plant Society's Electronic Inventory, the U.S. Fish and Wildlife Service's list of Federal Endangered and Threatened Species, the federal Migratory Bird Treaty Act, local habitat conservation plans or policies, as well a variety of other environmental resources, and any proposed mitigation programs
- Provide copies of any wildlife and habitat survey reports done in connection with the Project and the surrounding area
- Describe any irreversible and irretrievable commitment of resources, including the adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency that would impact nonrenewable resources and the associated impacts that this consumption could have on future generations
- Identify special consideration and mitigation techniques used for the Project
- Identify (1) any hazardous materials, hazardous substances or waste material that currently exist on the Project Site, and (2) any hazardous materials which will be stored and/or used on the Project Site or in the construction of the Project and plans for containment of hazardous materials in the event of a spill or other accident
- Provide details of how the Project, either upon completion or during construction, will meet or fail to meet existing water quality standards or waste discharge requirements, or otherwise substantially degrade surface water quality, impact the chemical balance of seawater, or conflict with a water quality control plan
- Describe if the Project will generate a substantial increase in ambient noise and vibration levels in the vicinity of the Project in excess of standards established in the Huntington Beach General Plan or noise ordinances, or applicable standards of other agencies or result in generation of excessive vibration or noise levels in the vicinity of the Project, including the flights over adjacent cities
- Provide nighttime light or glare, and noise impact analyses for all sensitive receptors impacted by the Project

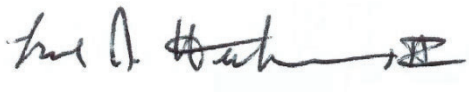
9-20
(cont.)

- Describe mitigation plans, such as the installation of light and noise barriers, placing Project entry and exit points from the Project away from sensitive receptors, and the orientation of public address systems away from sensitive receptors
- Provide details of any construction of new or expansion of existing utilities that could cause significant environmental effects, generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities

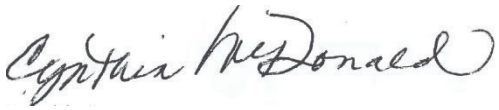
8. **Conclusion**. When executed well, a CEQA analysis promotes sustainable development and builds trust with the public. The EIR for this Project gives the City an opportunity to serve the residents of Huntington Beach and adjacent cities by transparently evaluating, disclosing, and mitigating the environmental impacts of this Project. To serve the community, we ask that the City comprehensively identify and evaluate all the impacts of the Project, particularly those affecting the many nearby sensitive receptors. CEQA entitles the public to full disclosure and mitigation of the environmental impacts of the Project prior to its approval.

Thank you for your attention. Please feel free to contact us should you have any questions. 9-20 (cont.)

Very truly yours,



Richard J. Huffman
Treasurer



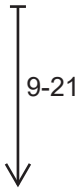
Cynthia McDonald
Assistant Treasurer

cc: Cities of Costa Mesa and Newport Beach
Coastal Corridor Alliance
Fairview Park Alliance

Costa Mesa First's mission is to educate Costa Mesans about planning policies in Costa Mesa so they make knowledgeable choices when voting. We encourage residents to choose walkable, bikeable, and inclusive neighborhoods, and the land use and transportation policies and investments needed to make Costa Mesa flourish. Our primary objective is to require Costa Mesa's leaders to put the residents of Costa Mesa first.

Attachment B

Letter dated March 4, 2024, to City from Fairview Park Alliance



March 4, 2024

A 501(c)(3) non-profit corporation
Tax ID 82-2238446

Board:

Kim Hendricks
President

Priscilla Rocco
Treasurer

Jason Komala
At-large board member

Mailing Address:

FPA
P.O. Box 2471
Costa Mesa, CA 92628-2471

E-Mail Address:

info@FairviewParkAlliance.org

Website:

www.FairviewParkAlliance.org

VIA EMAIL – connor.hyland@surfcity-hb.org

Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Re: Pacific Airshow Huntington Beach Project

Dear Mr. Hyland,

Fairview Park Alliance (FPA) is a nonprofit corporation in Costa Mesa dedicated to restoring, protecting, and preserving Fairview Park in Costa Mesa (2525 Placentia Ave.) for all generations in perpetuity. Fairview Park is 208 acres with 5 distinct habitats and home to endangered and threatened plants and wildlife. Autumn is migration season for many birds and many birds depend on Fairview Park for food and rest. The Pacific Airshow has had a negative impact on Fairview Park due to the high decibels of noise, air traffic, and air quality.

FPA appreciates the opportunity to comment on the preparation of an Environmental Impact Report (EIR) for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project") to be located in Huntington Beach, California. The Show Center Area and the Airshow Performance Area collectively comprise the project site ("Project Site"). However the Notice of Preparation (NOP) indicates for the purpose of a technical analysis within the draft EIR, a broader study area may be defined that extends beyond the Project Site to reflect the potential impacts associated with civilian and military aircraft flybys and aerial acrobatics traveling to/from the Airshow Performance Area.

9-21 (cont.)

The City of Huntington Beach is required to follow California Environmental Quality Act (CEQA) and the EIR must contain noise and vibration studies extended outside of the City boundaries to those areas impacted by the noise and vibration originating from the Airshow, like Fairview Park, Talbert Regional Park, and Randall Preserve.

The EIR must also contain surveys of the surrounding areas, like Fairview Park, Talbert Regional Park, and Randall Preserve for wildlife and ecologically sensitive habitat and reports must be provided. The migration corridors between habitat areas must be preserved.

Fairview Park, Talbert Regional Park, and Randall Preserve have sensitive receptors that may be exposed to pollutant receptors and must be included in the air quality study performed in connection with the EIR.

FPA would like to see a thorough EIR that allows the residents of Huntington Beach and surrounding cities to understand the impacts on their community.

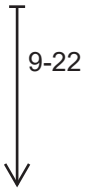
Thank you,

Kim Hendricks
Fairview Park Alliance - President

9-21
(cont.)

Attachment C

Letter dated March 4, 2024, to City from Hamilton Biological



HAMILTON BIOLOGICAL

March 4, 2024

Mr. Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

SUBJECT: COMMENTS ON THE NOTICE OF PREPARATION PACIFIC AIRSHOW HUNTINGTON BEACH PROJECT

Dear Mr. Hyland,

On behalf of the Coastal Corridor Alliance, I provide these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project).

EIR MUST EVALUATE POTENTIAL EFFECTS IN NEARBY NATURAL AREAS

9-22 (cont.)

Although the performance area for the airshow is limited to the largely developed area between Beach Boulevard and Seventh Street in Huntington Beach, the effects of increased air traffic and noise will extend up and down the coast, potentially affecting nearby sensitive habitat areas. To the south, near the mouth of the Santa Ana River, is a dedicated nesting area for the California Least Tern, and the Huntington Beach Wetlands, occupied by another listed species, Belding's Savannah Sparrow. A short distance inland from the mouth of the Santa Ana River lies the ecologically sensitive Randall Preserve, which supports numerous listed and otherwise "special-status" species, including Belding's Savannah Sparrow, California Gnatcatcher, Least Bell's Vireo, and potentially Burrowing Owls. To the north of the performance area lies the Bolsa Chica Ecological Preserve, which supports a large tern nesting colony, Belding's Savannah Sparrows, Western Snowy Plovers, and other sensitive resources.

The project biologists should carefully evaluate the project's potential adverse effects to bird populations in these important natural areas. In particular, the EIR should cite relevant, current research on the effects of aircraft operations and aircraft noise upon nesting birds. The EIR must evaluate all potential adverse project effects to nesting birds, and it would be appropriate for the City to provide for biological monitoring of the tern colonies at the Santa Ana River mouth and at Bolsa Chica to improve understanding of the extent to which airshow activities do or do not affect colonial nesting birds in the nearby area. If potentially significant impacts are identified that cannot be avoided, compensatory mitigation must be provided.

316 Monrovia Avenue · Long Beach, CA 90803 · 562-477-2181 · robb@hamiltonbiological.com

EIR Must Evaluate Potential Effects of Nocturnal Activities

The EIR must also evaluate the potential effects of nocturnal project activities ("Airshow performer private party and live music entertainment with nighttime flyovers by designated aircraft including parachute jumps onto the beach occurring during the evening hours of the of the music festival"). These activities are proposed to occur as late as 11:00 p.m., which could disrupt nesting of California Least Terns or other birds in natural areas near the performance area. For example, if nighttime flyovers startle terns off their nests, this could lead to increased predation of the nests or even abandonment of nests. The EIR must evaluate all such potential adverse project effects, and it would be appropriate for the City to provide for biological monitoring of the tern colonies at the Santa Ana River mouth and at Bolsa Chica to improve understanding of the extent to which nocturnal airshow activities do or do not affect colonial nesting birds in the nearby area. If potentially significant impacts are identified that cannot be avoided, compensatory mitigation must be provided.

Conclusion

9-22
(cont.)

On behalf of the Coastal Corridor Alliance, thank you for the opportunity to provide these comments on the NOP for the proposed airshow project.

Sincerely,



Robert A. Hamilton, President
Hamilton Biological, Inc.

316 Monrovia Avenue
Long Beach, CA 90803
562-477-2181
robb@hamiltonbiological.com

cc: Terry Welsh, President, Coastal Corridor Alliance
Melanie Schlotterbeck, Stewardship Consultant, Coastal Corridor Alliance

Comment Letter 9: Costa Mesa First

Response to Comment 9-1

In the Costa Mesa First comment letter, dated March 4, 2024 (herein referred to as Attachment A), the commentor notes "Thank you for the opportunity to provide comments on the preparation of an Environmental Impact Report for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project" to be located in Huntington Beach, California." Accordingly, this Responses to Comments document responds to those Notice of Preparation comments that were specifically raised in the Costa Mesa First Draft EIR comment letter.

In the Fairview Park Alliance comment letter dated March 4, 2024 (herein referred to as Attachment B and included in this Response to Comments during under Comment Letter 10), the commentor notes that "FPA appreciates the opportunity to comment on the preparation of an Environmental Impact Report (EIR) for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project" to be located in Huntington Beach, California." Accordingly, this Response to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to the Draft EIR, dated February 2025. Refer to Response to Comment 9-10 regarding noise and vibration studies beyond the City boundaries. Refer to Response to Comment 9-14 regarding why no additional air quality analyses are required for the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park.

In the Hamilton Biological comment letter dated March 4, 2024 (herein referred to as Attachment C and included in this Response to Comments document under Comment Letter 11), the commentor notes "On behalf of the Coastal Corridor Alliance, I provided these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project)."Accordingly, this Responses to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to Draft EIR, dated February 2025. For the evaluation of potential effects in nearby natural areas and the evaluation of potential effects of nocturnal activities, please refer to Section 3.2, *Biological Resources*, in the Draft EIR. Also, please refer to Master Response C regarding nesting season and Response to Comment 2-15 regarding biological monitoring.

Response to Comment 9-2

The letter dated April 7, 2025, prepared by Costa Mesa First, is included in the Project record and is responded to here under Comment Letter 9. All comments will be appropriately responded to by the City herein Chapter 3, *Responses to Comments*, within the Final EIR for the Pacific Airshow Huntington Beach Project. In some instances, in response to the comment, the City has made additions or deletions to the text of the Draft EIR and included in Chapter 4, *Corrections and Additions*. The revisions do not significantly alter the conclusions in the Draft EIR. Therefore, the Draft EIR is not required for recirculation per *CEQA Guidelines* Section 15088.5. The City will notify Costa Mesa First regarding the availability of any applicable future documents associated with the Project.

Response to Comment 9-3

This comment summarizes the Project Description and is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 9-4

As described in Chapter 2, *Project Description*, page 2-1, of the Draft EIR, the Show Center Area is the location where primary on-the-ground events and activities of the Airshow take place, which is located in the City of Huntington Beach. Locally, the approximate boundaries of the Show Center Area from northwest to southeast are 7th Street and Pacific Coast Highway (State Route 1 or SR-1) to Beach Boulevard (State Route 39 or SR-39) and Pacific Coast Highway to the Pacific Ocean including a portion of the Huntington Beach Pier landward of the State Lands Commission mean high tide line. The Airshow Performance Area, the primary area for civilian and military aircraft flybys and aerial acrobatics, is located adjacent to the Show Center Area over the Pacific Ocean with an east-west length of approximately 3,000 feet from the shoreline and a north-south length of approximately 12,000 feet. A majority of the civilian and military aircraft flybys and aerial acrobatics occur within approximately 500 and 1,500 feet from the shoreline. The Airshow Performance Area, or the aerobatic box, is identified by large marker buoys placed in the ocean that identify this area.

In compliance with the provision of CEQA Guidelines Sections 15085(a) and 15087, the City of Huntington Beach, serving as the Lead Agency: (1) prepared and transmitted a Notice of Completion (NOC) to the State Clearinghouse; (2) published a Notice of Availability (NOA) of a Draft EIR which indicated that this Draft EIR was available for public review at the City's Community Development Department, the Huntington Beach Central Library, and the City's Website; (3) provided copies of the NOA and Draft EIR to the City's Community Development Department, the Huntington Beach Central Library; (4) posted the NOA and the Draft EIR on the City's Website: www.huntingtonbeachca.gov; (5) published legal notice (1/8th page) in the Huntington Beach Wave; (6) sent a NOA to the last known name and address of all organizations and individuals who previously requested such notice in writing or attended public meetings about the Project; and (7) filed the NOA with the County Clerk. The City of Newport Beach and the City of Costa Mesa was notified as both cities are included in the City of Huntington Beach's interested parties list.

Proof of publication is available at the City of Huntington Beach Planning Division.

Response to Comment 9-5

As discussed in Chapter 4, *Alternatives*, Section 4.3.1, Offsite Location, page 4-3, the Offsite Location Alternative would aim to be located further from sensitive biological resources. Sensitive habitat is located along the coastline including the Huntington Beach Wetlands, the Magnolia Marsh, and the BCER. In order to be located away from the areas that contain more sensitive biological resources, the site would likely need to be at a more inland location, where there would be less space for attendees to congregate as well as fewer areas to view the Airshow compared to the proposed Project Site. In addition, the likelihood of finding a location that would be able to accommodate the number of activities planned (Airshow, music festival, wave pool surf competitions, skateboard/BMX event, etc.) for the Airshow would be low.

This Alternative was considered infeasible due to the fact that there are very few, if any, other locations within the City that are City-owned and would be able to provide the services and area for the Airshow to be conducted and viewed. The alternative site would need to be up to approximately 100 acres in size in order to accommodate the parking, viewing areas, and other activities. Per the CEQA guidelines, the Offsite Location Alternative was rejected as infeasible using the criteria for off-site alternatives, including site suitability, economic viability, jurisdictional boundaries, whether the project proponent owns the site, and whether the project proponent can control site access.

Some of the alternative sites considered that would be large enough to accommodate the activities include Edison High School and Central Park located in the City. Edison was rejected because this site would be closer to the Huntington Beach wetlands complex, and therefore, not necessarily further from sensitive biological resources. Central Park was also rejected due to the sensitive habitat and species that are present throughout the Park. Central Park has three freshwater lakes that are used by waterfowl and other birds. Portions of Central Park are also located closer to the BCER. Therefore, due to the proximity of sensitive habitat and sensitive species at the two locations most appropriate to be considered as alternative sites, these locations would not reduce impacts to biological resources

Response to Comment 9-6

In regards to public access, refer to Response to Comment 1-6. As discussed under Response to Comment 1-6, during the Airshow and multi-day music festival, and only during event operation and music festival hours, public access would be limited to ticketed holders within the defined areas through the use of fencing and Airshow personnel and security. Only approximately 8 percent of the available sandy beach space is occupied by the ticketed areas and all other areas of the sandy beach, including substantially all of the other public spaces, are free to view spaces. Further, similar to the Airshow, the Applicant will consider providing free general admission tickets during each night of the music festival to the general public primarily to (a) students, (b) underserved youth and (c) their respective caregivers or guardians. A report of how the tickets were distributed shall be made available within 30 days post event upon written request from the California Coastal Commission. The Airshow is not violating laws of environmental justice.

Response to Comment 9-7

The comment correctly indicates that the Draft EIR concluded that future Project Airshow mobile sources associated with additional daily VMT from the expanded night concerts as compared to prior Airshows were estimated through emissions calculations, using the CARB EMFAC2021 on-road vehicle emissions factor model to determine emission factors, and would result in a significant and unavoidable impact and there are no feasible mitigation measures that would reduce operational VOC, NO_X, and CO emissions for vehicular sources to below the significance thresholds as discussed in Section 3.1, *Air Quality*, pages 3.1-22 and 3.1-23, of the Draft EIR. In addition, as described on page 3.1-20 of the Draft EIR, since the Project's future Airshow aircraft activities, competitions and art installations, temporary event structures, multi-day music festivals and temporary Airshow pyrotechnic display are expected to be similar as those featured in prior Airshows or would not result in new emissions, these emissions were not considered in the Draft

EIR (see page 3.1-20 of the Draft EIR, for additional details). The comment fails to specify why using estimated emissions calculations to discuss the Project's air quality impacts were insufficient and what specific "study data" the Draft EIR is missing. As such, the estimated emissions calculations and impact conclusions determined in the Draft EIR are sufficient and no further response is required.

Response to Comment 9-8

The comment incorrectly claims that the Project may cause CO hotspots due to queuing of traffic as a result of the Project. The Project's potential to cause CO hotspots was not discussed in the Project's Draft EIR, but the Project's Initial Study. As discussed on page 3-13 and 3-14 of the Project's Initial Study, while the Project may result in an increase in vehicle trips and vehicle miles traveled as a result of future Airshow events compared to the prior and existing Airshow events, the CO concentrations in the vicinity are substantially below the CAAQS and NAAQS where as reported in the Project's Initial Study, the SCAQMD monitoring data from 2021 at the monitoring site located nearest to the Project indicates a maximum CO concentration of 2.3 parts per million (ppm) (1-hour) compared to the 20 ppm (1-hour) CAAQS and a maximum concentration of 1.7 ppm (8-hour) compared to the 9.0 ppm (8-hour) CAAQS and the 9 ppm (8-hour) NAAQS. Furthermore, based on the latest SCAQMD available for year 2023, the monitoring site located nearest to the Project indicates a maximum CO concentration of 2.4 parts per million (ppm) (1-hour) and a maximum concentration of 1.9 ppm (8-hour), which are still much lower than the relevant CAAQS and NAAQS. Therefore, as discussed in the Project's Initial Study, not only have CO concentrations have declined compared to previous decades primarily as a result of improvements in vehicle emissions standards. As vehicle emissions continue to decline from improvements in vehicle emissions standards and zero emissions vehicles (e.g., electric vehicles), the Project would not cause or contribute to CO hotspots from Project vehicle trips, vehicle miles traveled, or vehicle congestion on major roadways or intersections. Thus, the Project would not result in exposure of sensitive receptors to CO hotspots and impacts would be less than significant. Therefore, as discussed in the Project's Initial Study, no further analysis of CO hotspots was required in the EIR. In addition, the incorrectly describes that Project traffic would combine with nonevent day traffic to cause CO hotspots. However, the Project would not affect vehicle trips on nonevent days and CO emissions associated with background traffic is not affected by the Project. As such, the findings of the Project's Initial Study that the Project would not result in CO hotspot and impact conclusions determined in the Project's Initial Study are sufficient and no further response is required.

Response to Comment 9-9

The Draft EIR evaluates traffic on key corridors in the City of Huntington Beach that connect to regional routes. While temporary increases in traffic may occur on regional facilities, these impacts are comparable to those from other special events that freeways and highways are designed to accommodate. Examples of comparably scaled activities:

- Los Angeles Angels (81 games annually)
- Anaheim Ducks (41 games annually)

- Orange County Fair (4 weeks annually)
- Concerts at various venues

These events are typical and distribute traffic broadly across the regional system. As such, they are not evaluated with respect to localized emergency access for multiple jurisdictions. Moreover, it is not possible to evaluate every hypothetical emergency scenario outside the Project area. The location and nature of potential emergencies is nearly infinite. The Draft EIR appropriately scopes the analysis to reflect the temporary and localized nature of the Project.

Further, the City of Huntington Beach has developed a Local Hazard Mitigation Plan and Emergency Operations Plan that includes coordination with adjacent cities and agencies. The Airshow's Public Safety Plan, in coordination with the Huntington Beach Police Department (HBPD) and the Huntington Beach Fire Department (HBFD), identifies roles, staging areas, and operational controls for crowd and traffic management during emergencies. While specific evacuation routes in neighboring cities are not analyzed, the Project does not propose to physically alter or block any regional evacuation corridors.

Response to Comment 9-10

Aircraft operations during future Airshows may temporarily exceed the cities established noise limits during daytime and nighttime hours, including noise sensitive land uses. Data collected during the 2023 Airshow indicates that noise levels could surpass the City's established noise limits by as much as 50 dB. However, these elevated noise levels are expected to be brief and not sustained over long periods. The purpose of noise monitoring was for informational purposes to understand the range of aircraft noise levels that may be experiences in close proximity to the Airshow. While measurements were not taken in other jurisdictions, it can be assumed that noise levels would be similar, or less, to those taken at the six location identified in the Draft EIR.

To mitigate the impact of aircraft noise on the surrounding community, event organizers have integrated several noise-reduction strategies into the Airshow's planning. These include recommending aircraft adhere to predetermined flight paths that are carefully designed to avoid residential areas whenever possible and keeping aircraft operations over water to the greatest extent feasible, reducing noise exposure for inland areas further from the coast. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. . While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities..

Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 9-11

The Project area examines impacts along the proposed flight path and a 500-foot buffer to encompass potential changes based on weather conditions, flight traffic, and other factors considered by air traffic controllers. For a discussion on nesting season, refer to Master Response C. For a discussion on biological monitoring, refer to Master Response D. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 9-12

The *Biological Resources Technical Report* (Appendix D) outlines why there is no suitable habitat for special-status species within the Show Center Area and a low potential for special-status species within the BCER.

The TFR spans a 5-mile radius and extends from the surface up to 15,000 feet MSL. This restriction is specifically designed to keep commercial and general aviation aircraft out of the designated Airshow airspace. By doing so, the TFR allows Airshow participants to safely reposition their aircraft within the restricted airspace for their performances, eliminating the risk of conflicts with unauthorized aircraft. At all times, the FAA, the Applicant, and pilots are committed to the safe operation of aircraft. While the pilot has ultimate control of the aircraft while in flight, the FAA has the primary role of ensuring safe and efficient use of the National Airspace System (NAS). Aircraft will adhere to the predetermined flight path as much as possible. As noted in Section 3.2, *Biological Resources*, Section 3.2.1 Environmental Setting, pages 3.2-1 and 3.2.-2, the proposed flight path and a 500-foot buffer was examined. This biological study area (BSA) does not overlap sensitive ecological areas including Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park. Additionally, biological monitoring and surveys have been conducted prior to and during the 2023 Airshow to identify potential impacts on bird behavior and none were observed. The Draft EIR also determined that the temporarily impacted areas would not significantly inhibit local or regional movement of wildlife within these avoided areas of the BSA. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 9-13

Refer to Response to Comment 9-14, 9-15, and 9-16 below for a discussion on impacts to air quality, noise, and transportation.

Response to Comment 9-14

As stated by the comment, the Project Draft EIR describes that there would be a significant and unavoidable regional operational air quality impact with regard to additional daily VMT from the expanded music festival as compared to prior Airshows. However, the comment is conflating the Project's regional operational impact as also being a localized operational air quality impact. As described in the Section 3.1, *Air Quality*, of the Draft EIR, the Project's local air quality impacts are discussed in the Project's Initial Study (Appendix B) and subsequently scoped out of the Draft

EIR as the Initial Study determined there would be no potential for construction or construction-related ground disturbance generating substantial localized emissions since the Airshow proposes no new permanent development and only consists of temporary event structures, all of which would be removed immediately following the conclusion of the Airshow. In addition, the Initial Study determined the Project would result in similar on-site operational emissions since: aircraft staging, maintenance, preparation activities, aircraft flight familiarization and aircraft flight practice flyers, and performance flyovers throughout the Airshow Performance Area, and temporary event structures for the Project would be similar to prior airshows; the Project's competitions and art installations would not result in new emissions from on-site activities; and the temporary Airshow pyrotechnic display would occur over water, similar to the City's annual 4th of July Fireworks Over The Ocean and would not result in permanent effects on the environment (see the Project's Initial Study, Appendix B, of the Draft EIR for additional details). Thus, the Initial Study determined the Project would not involve construction or operations that would result in exposure of sensitive receptors to substantial pollutant concentrations and impacts would be less than significant and scoped out of the Draft EIR. Furthermore, the Initial Study did not include the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park in the list of sensitive receptors because the Initial Study listed the sensitive receptors within a quarter-mile radius of the Project boundary and these three receptors are further than those listed in the Initial Study. As noted in Section 3.2, *Biological Resources*, Section 3.2.1 Environmental Setting, pages 3.2-1 and 3.2.-2, the proposed flight path and a 500-foot buffer was examined. This BSA does not overlap sensitive ecological areas including Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park. Furthermore, as shown in Figure 2-2 and Figure 2-3 within the Chapter 2, *Project Description*, of the Draft EIR, the closest portions of the Project's Show Center and Airshow Performance Area, where the Project's majority of localized emissions would occur, would be over 2.0 miles from the closest portion of the Frank and Joan Randall Preserve and Talbert Regional Park, and over 2.8 miles from Fairview Park. Therefore, as the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park are located at greater distances from the Project Site as compared to those listed in the Initial Study, these three receptors would be less impacted by localized Project emissions. Therefore, no additional air quality analyses are required for the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park and the Initial Study's conclusion that the Project would not involve construction or operations that would result in exposure of sensitive receptors to substantial pollutant concentrations and impacts would be less than significant remains unchanged and no further response is needed.

Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 9-15

Refer to Response to Comment 9-10.

Response to Comment 9-16

The Project would result in traffic volumes like other special events (refer to Response to Comment 9-9) which freeways and state highways are designed to support. Traffic volumes from the Project will diminish with distance from the Project, and the exact roadways that will be used are unpredictable beyond the City. Level of service traffic impacts are not allowed as a measure of environmental impact related to transportation/traffic subsequent to the State's adoption of Senate Bill (SB) 743 (July 2020).

Regarding construction traffic, the Project involves only temporary setup and breakdown of event infrastructure. Equipment can be delivered via SR-1 and adopted truck routes throughout the City. These routes regularly support heavy vehicles, and the Project is not anticipated to generate oversized loads. Given the modest scale of set up and site breakdown activities, alternative construction routes are not warranted, and the Draft EIR appropriately scopes the analysis to reflect the scale and temporary nature of the Project.

Response to Comment 9-17

Refer to Response to Comment 9-1 and 9-2.

Response to Comment 9-18

Refer to Response to Comment 9-1 and 9-2.

Response to Comment 9-19

Refer to Response to Comment 9-1 and 9-2.

Response to Comment 9-20

In the Costa Mesa First comment letter, dated March 4, 2024 (herein referred to as Attachment A), the commentor notes "Thank you for the opportunity to provide comments on the preparation of an Environmental Impact Report for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project" to be located in Huntington Beach, California." Accordingly, this Responses to Comments document responds to those Notice of Preparation comments that were specifically raised in the Costa Mesa First Draft EIR comment letter. No further response is required.

Response to Comment 9-21

In the Fairview Park Alliance comment letter dated March 4, 2024 (herein referred to as Attachment B and included in this Response to Comments during under Comment Letter 10), the commentor notes that "FPA appreciates the opportunity to comment on the preparation of an Environmental Impact Report (EIR) for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project" to be located in Huntington Beach, California." Accordingly, this Response to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to the Draft EIR, dated

February 2025. Refer to Response to Comment 9-10 regarding noise and vibration studies beyond the City boundaries. Refer to Response to Comment 9-14 regarding why no additional air quality analyses are required for the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park. No further response is required.

Response to Comment 9-22

In the Hamilton Biological comment letter dated March 4, 2024 (herein referred to as Attachment C and included in this Response to Comments document under Comment Letter 11), the commentor notes “On behalf of the Coastal Corridor Alliance, I provided these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project).”Accordingly, this Responses to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to Draft EIR, dated February 2025. For the evaluation of potential effects in nearby natural areas and the evaluation of potential effects of nocturnal activities, please refer to Section 3.2, *Biological Resources*, in the Draft EIR. Also, please refer to Master Response C regarding nesting season and Response to Comment 2-15 regarding biological monitoring. No further response is required.

Comment Letter 10

March 4, 2024

A 501(c)(3) non-profit corporation
Tax ID 82-2238446

Board:

Kim Hendricks
President

Priscilla Rocco
Treasurer

Jason Komala
At-large board member

Mailing Address:

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Costa Mesa, CA 92628-2471

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info@FairviewParkAlliance.org

Website:

www.FairviewParkAlliance.org

VIA EMAIL – connor.hyland@surfcity-hb.org

Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Re: Pacific Airshow Huntington Beach Project

Dear Mr. Hyland,

Fairview Park Alliance (FPA) is a nonprofit corporation in Costa Mesa dedicated to restoring, protecting, and preserving Fairview Park in Costa Mesa (2525 Placentia Ave.) for all generations in perpetuity. Fairview Park is 208 acres with 5 distinct habitats and home to endangered and threatened plants and wildlife. Autumn is migration season for many birds and many birds depend on Fairview Park for food and rest. The Pacific Airshow has had a negative impact on Fairview Park due to the high decibels of noise, air traffic, and air quality.

FPA appreciates the opportunity to comment on the preparation of an Environmental Impact Report (EIR) for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project") to be located in Huntington Beach, California. The Show Center Area and the Airshow Performance Area collectively comprise the project site ("Project Site"). However the Notice of Preparation (NOP) indicates for the purpose of a technical analysis within the draft EIR, a broader study area may be defined that extends beyond the Project Site to reflect the potential impacts associated with civilian and military aircraft flybys and aerial acrobatics traveling to/from the Airshow Performance Area. 10-1

The City of Huntington Beach is required to follow California Environmental Quality Act (CEQA) and the EIR must contain noise and vibration studies extended outside of the City boundaries to those areas impacted by the noise and vibration originating from the Airshow, like Fairview Park, Talbert Regional Park, and Randall Preserve.

The EIR must also contain surveys of the surrounding areas, like Fairview Park, Talbert Regional Park, and Randall Preserve for wildlife and ecologically sensitive habitat and reports must be provided. The migration corridors between habitat areas must be preserved.

Fairview Park, Talbert Regional Park, and Randall Preserve have sensitive receptors that may be exposed to pollutant receptors and must be included in the air quality study performed in connection with the EIR.

FPA would like to see a thorough EIR that allows the residents of Huntington Beach and surrounding cities to understand the impacts on their community.

Thank you,

Kim Hendricks
Fairview Park Alliance - President

10-1
(cont.)



10-1
(cont.)

Sincerely,

Name
Title
Fairview Park Alliance

Comment Letter 10: Fairview Park Alliance

Response to Comment 10-1

In the Fairview Park Alliance comment letter dated March 4, 2024, the commentor notes that "FPA appreciates the opportunity to comment on the preparation of an Environmental Impact Report (EIR) for the proposed expansion of the Pacific Airshow Huntington Beach Project (the "Project" to be located in Huntington Beach, California." Accordingly, this Response to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to the Draft EIR, dated February 2025. Refer to Response to Comment 9-10 regarding noise and vibration studies beyond the City boundaries. Refer to Response to Comment 9-14 regarding why no additional air quality analyses are required for the Frank and Joan Randall Preserve, Fairview Park, and Talbert Regional Park. No further response is required.

HAMILTON BIOLOGICAL

March 4, 2024

Mr. Connor Hyland, Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

SUBJECT: COMMENTS ON THE NOTICE OF PREPARATION PACIFIC AIRSHOW HUNTINGTON BEACH PROJECT

Dear Mr. Hyland,

On behalf of the Coastal Corridor Alliance, I provide these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project).

EIR MUST EVALUATE POTENTIAL EFFECTS IN NEARBY NATURAL AREAS

Although the performance area for the airshow is limited to the largely developed area between Beach Boulevard and Seventh Street in Huntington Beach, the effects of increased air traffic and noise will extend up and down the coast, potentially affecting nearby sensitive habitat areas. To the south, near the mouth of the Santa Ana River, is a dedicated nesting area for the California Least Tern, and the Huntington Beach Wetlands, occupied by another listed species, Belding's Savannah Sparrow. A short distance inland from the mouth of the Santa Ana River lies the ecologically sensitive Randall Preserve, which supports numerous listed and otherwise "special-status" species, including Belding's Savannah Sparrow, California Gnatcatcher, Least Bell's Vireo, and potentially Burrowing Owls. To the north of the performance area lies the Bolsa Chica Ecological Preserve, which supports a large tern nesting colony, Belding's Savannah Sparrows, Western Snowy Plovers, and other sensitive resources. 11-1

The project biologists should carefully evaluate the project's potential adverse effects to bird populations in these important natural areas. In particular, the EIR should cite relevant, current research on the effects of aircraft operations and aircraft noise upon nesting birds. The EIR must evaluate all potential adverse project effects to nesting birds, and it would be appropriate for the City to provide for biological monitoring of the tern colonies at the Santa Ana River mouth and at Bolsa Chica to improve understanding of the extent to which airshow activities do or do not affect colonial nesting birds in the nearby area. If potentially significant impacts are identified that cannot be avoided, compensatory mitigation must be provided.

316 Monrovia Avenue ~ Long Beach, CA 90803 ~ 562-477-2181 ~ robb@hamiltonbiological.com

EIR Must Evaluate Potential Effects of Nocturnal Activities

The EIR must also evaluate the potential effects of nocturnal project activities ("Airshow performer private party and live music entertainment with nighttime flyovers by designated aircraft including parachute jumps onto the beach occurring during the evening hours of the of the music festival"). These activities are proposed to occur as late as 11:00 p.m., which could disrupt nesting of California Least Terns or other birds in natural areas near the performance area. For example, if nighttime flyovers startle terns off their nests, this could lead to increased predation of the nests or even abandonment of nests. The EIR must evaluate all such potential adverse project effects, and it would be appropriate for the City to provide for biological monitoring of the tern colonies at the Santa Ana River mouth and at Bolsa Chica to improve understanding of the extent to which nocturnal airshow activities do or do not affect colonial nesting birds in the nearby area. If potentially significant impacts are identified that cannot be avoided, compensatory mitigation must be provided.

11-1 (cont.)

Conclusion

On behalf of the Coastal Corridor Alliance, thank you for the opportunity to provide these comments on the NOP for the proposed airshow project.

Sincerely,



Robert A. Hamilton, President
Hamilton Biological, Inc.

316 Monrovia Avenue
Long Beach, CA 90803
562-477-2181
robb@hamiltonbiological.com

cc: Terry Welsh, President, Coastal Corridor Alliance
Melanie Schlotterbeck, Stewardship Consultant, Coastal Corridor Alliance

Comment Letter 11: Hamilton Biological

Response to Comment 11-1

In their comment letter dated March 4, 2024, the commentor notes “On behalf of the Coastal Corridor Alliance, I provided these comments on a Notice of Preparation prepared by the City of Huntington Beach (the City) for the proposed Pacific Airshow Huntington Beach project (the proposed project).”Accordingly, this Responses to Comments document responds to comments that were specifically raised in the Draft EIR, not the Notice of Preparation. Please refer to Draft EIR, dated February 2025. For the evaluation of potential effects in nearby natural areas and the evaluation of potential effects of nocturnal activities, please refer to Section 3.2, *Biological Resources*, in the Draft EIR. Also, please refer to Master Response C regarding nesting season and Response to Comment 2-15 regarding biological monitoring. No further response is required.

Comment Letter 12

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April 7, 2025

Via Email *Connor.Hyland@surfcity-hb.org*

Mr. Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach
Department of Community Development
2000 Main Street, 4th Floor
Huntington Beach, CA 92648

Re: Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project, SCH No. 2024020006

Dear Mr. Hyland,

We submit these comments on behalf of the Bolsa Chica Land Trust (BCLT) in connection with the City's consideration of the draft environmental impact report (DEIR) for the Pacific Airshow Project (Project). The Bolsa Chica Land Trust was formed in 1992 to preserve one of the last standing wetland ecosystems in Southern California. BCLT now has over 5,000 members dedicated to protecting, preserving, restoring, educating, and advocating for Bolsa Chica's future. 12-1

In its past correspondence with the City about the Airshow, BCLT has sought one thing – avoidance of the Bolsa Chica Ecological Reserve by the low-flying aircraft affiliated with the Airshow. With its DEIR comments, BCLT repeats this reasonable request and asks the City to revise the DEIR to: 12-2

(1) **Include the Bolsa Chica Ecological Reserve (BCER) within the project area analyzed in the DEIR.** During past airshows, many of the show's aircraft have flown over at low altitude, with documented adverse impacts to wildlife. 12-3

(2) **Revise the Project scope to include the seven days leading up to the airshow.** In past years, the greatest impacts to wildlife and the BCER have occurred prior to, not during, the airshow occurring during pre-show flyovers. 12-4

(3) **Prohibit airshows during nesting season.** Terns and plovers are especially vulnerable, and the Project terms do not limit the months during which the airshow may be held. We request that the show not take place during the nesting season and months during which there is coastal avian migration in the region. The 2024 Airshow occurred the week after peak migration along the Pacific Flyway. 12-5

(4) **Impose a prohibition on BCER overflights.** If extenuating circumstances require overflights, an elevation buffer must be strictly enforced and BCER reserve management (CDFW) must be notified prior to and/or immediately following the flyover. 12-6

For several years, BCLT and the state and federal wildlife agencies responsible for the Bolsa Chica Ecological Reserve and the enforcement of state and federal wildlife laws have documented and raised concerns about the airshow's impact to sensitive species and habitat. Accordingly, the EIR was required to disclose, analyze, and mitigate any impacts of these overflights to biological resources. Instead, the EIR ignores these well-documented concerns, claiming, without evidence, that the Project would not include BCER overflights. The EIR compounds this error by then finding the airshow will have no significant impacts and requires no mitigation. 12-7

As the City, Operator, and the managing state and federal wildlife agencies know, the airshow's pre-show flights do, in fact, fly over the Reserve every year. If the Project contained enforceable mitigation prohibiting flyovers of the Reserve *at any time*, the DEIR's conclusions might be supportable. However, without such a condition, the DEIR's conclusions lack the requisite substantial evidence. This is particularly important given that the DEIR discloses future plans to expand the airshow to five show days, as opposed to the three historically conducted. Approval of this Project without first disclosing the Project's full scope, analyzing the impacts of the true project on species, and fully mitigating those impacts violates CEQA. 12-8

I. The Pacific Airshow Huntington Beach Project.

The Pacific Airshow has historically been held in the fall for three days (Friday through Sunday), with practice flyovers beginning as early as Monday of the week of the airshow. While flyovers have generally occurred during the day, other airshow events extend into the night, as late as 10 pm. The DEIR states that the City anticipates future airshows may extend to five days, with events 12-9

lasting until 11 pm. The Project would authorize ten years of airshows pursuant to the City's Specific Event Permit Process. New events include nighttime flyovers, multi-day air racing, and a beach helipad. 12-9 (cont.)

II. The Bolsa Chica Ecological Reserve.

The Bolsa Chica Ecological Reserve consists of approximately 1,400 acres of coastal estuary adjacent to Huntington Beach. It was established to preserve and protect coastal wildlife and habitat. BCER is the largest saltwater marsh between Monterey Bay and the Tijuana River Estuary. It is managed by the California Department of Fish and Wildlife (CDFW) and owned by the State Lands Commission and CDFW. BCER is home to over 800 species of plants and animals, including 24 species that are threatened, endangered, or of special concern. 12-10

III. Aircraft Fly Over the Bolsa Chica Ecological Reserve, with Documented Impacts to Sensitive Species.

BCLT, wildlife agencies, and members of the public have documented myriad airshow impacts on biological resources that require evaluation, future avoidance, and mitigation under CEQA. State agencies have documented repeated, low aircraft passes over the wetlands, the startling noise of the jets, and repeated flushing of birds from the Reserve. In 2022, the Army dropped streamers into the Reserve. In 2023, the U.S. Fish and Wildlife Service wrote to the City to warn that it had noticed aircraft transit above BCER and that the noise and vibration from such transit could disrupt sensitive wildlife. During the 2024 airshow, hundreds of birds were flushed by repeated midday flyovers of the BCER. Video of this incident was provided to the Operator. Affected birds included species of special concern. BCLT attaches the letters of CDFW, the State Lands Commission, California Coastal Commission, and BCLT documenting these flyovers and BCER impacts. 12-11

IV. The DEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Potential Impacts to the Bolsa Chica Ecological Reserve and Sensitive Species.

a. CEQA Requirements.

The California Environmental Quality Act (CEQA) was enacted to promote decision making that protects the environment through information gathering and public accountability. 12-12

> The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish. … The EIR is intended to furnish both the road map and the environmental price tag for a project, so that the decision maker and the public both know, before the journey begins, just where the journey will lead, and how much they -- and the environment -- will have to give up in order to take that journey.

(*Natural Resources Defense Council v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271.)

CEQA requires a "mandatory finding of significance" if a project has the potential to "substantially degrade the quality of the environment. ..." (Guidelines §15065(a)(1).) An EIR must also disclose, analyze and mitigate the impacts of a project when they may:

- Have a substantial adverse effect on any species identified as candidate, sensitive, or special status;
- Have a substantial adverse effect on any … sensitive natural community;
- Have a substantial adverse effect on state or federally protected wetlands; or
- Interfere substantially with the movement of any native resident or migratory…wildlife species or … wildlife corridors, or impede the use of native wildlife nursery sites.

CEQA Guidelines Appendix G, §§ IV(a), (c), (d). The Bolsa Chica Ecological Reserve hosts both migratory and resident special-status species, contains sensitive natural communities, and contains state and federally protected wetlands.

12-12 (cont.)

b. The DEIR Fails to *Accurately Disclose*, Analyze or Mitigate the Impacts of Aircraft Flights Over the Reserve.

In response to the complaints documented by the managing wildlife agencies, extensive meetings about the airshow, its impacts, and requested mitigation were conducted in which the wildlife agencies met with the City and Operator. The agencies provided documentation of the airshow's past harm to

12-13

wildlife and evidence of overflights. None of this information is reflected in the conclusions or mitigation of the DEIR. This violates CEQA's informational disclosure provisions. As currently written, the EIR paints a misleading and inaccurate picture of the Project's significant impacts on sensitive wildlife. (*Citizens to Pres. the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 430-432 [EIR may not understate information concerning severity of impacts and skew perspective to downplay seriousness of impact]; *Mountain Lion Coalition v. Fish & Game Com*. (1989) 214 Cal.App.3d 1043, 1050-1051 [EIR may not avoid well-known important environmental considerations and sweep "serious criticisms [] under the rug"]; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 104 [overruled on other grounds] [EIR fails as an informational document by omitting or ignoring contrary information]; *Kings County Farm Bureau, supra,* 221 Cal.App.3d at 724 [agency must produce relevant environmental data and may not avoid attack on adequacy of EIR by excluding such information].) 12-13 (cont.)

While the DEIR recognizes that "[c]oncerns with biological resources, impacts to the Bolsa Chica Ecological Reserve" were raised in connection with the Notice of Preparation (ES-5 [citing Exhibit A comments of wildlife agencies]), the DEIR finds the Project has no potential to adversely affect biological resources, even *without* mitigation. (ES-9.) Given that the wildlife agencies have documented environmental harm from past airshows, and that the Project includes no restrictions on overflights of the BCER nor even overflight altitude limits, this conclusion lacks substantial evidence. 12-14

Critically, the DEIR restricts its review to a project area that appears limited to the pier and general surrounding area and to the main airshow days where attendance is paid. While this may be the area wherein flights are planned during the main airshow, the full Project area is much larger, and evidence demonstrates this area includes the BCER. CEQA Guidelines § 15125 (c) explains:

> Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be place on environmental resources that are rare or unique to that region and that would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed …

The DEIR's failure to include BCER in the study area violates CEQA. 12-15

The Project also includes *several days of practice flights* seemingly omitted from the environmental review. These practice flights fly over BCER – every year. CEQA requires environmental review to evaluate the "whole of a project." (CEQA Guidelines § 15003(h).) Nothing permits an EIR to arbitrarily exclude portions of a project or its operating area from environmental review. A "curtailed, enigmatic or unstable project description draws a red herring across the path of public support." (*County of Inyo v. City of Los Angeles* (1981) 71 Cal.App.3d 185, 197-98.) The DEIR must be revised to disclose, analyze, and mitigate the impacts of these overflights. 12-16

The DEIR further disclaims any City or airshow control over where aircraft will fly, based on the Federal Aviation Administration's regulation of airspace. However, FAA Advisory Circular No. 91-36D expressly recommends that aircraft avoid noise-sensitive areas because, "[e]xcessive aircraft noise can … adversely affect wildlife" which is "particularly undesirable in … wildlife refuges." Thus, the airshow should be subject to prohibition on BCER overflights outside of emergency conditions wherein flights may need to be redirected. 12-17

The DEIR states, "preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow …" (DEIR pp. 2-10 and 2011.) However, preactivity monitoring for impacts to birds and to prevent the dropping of debris (such as the streamers dropped in 2022) should occur on *all* days airshow-related aviation will occur. However, impacts to the birds and wildlife at BCER would be better avoided, and likely eliminated, by prohibiting airshow-related overflights of the BCER. 12-18

c. The DEIR Relies on an Inaccurate Environmental Baseline.

Another basis for the EIR's unsupported claim of no significant biological impacts is its use of an inaccurate baseline. CEQA requires an EIR to examine the difference between with-project and without-project conditions. (See, CEQA Guidelines § 15125(a).) An inflated baseline obscures a project's true environmental impact, infecting the DEIR's entire analysis and preventing necessary mitigation. 12-19

The Project Description states, "Numerous daily flights by commercial and private aircraft currently fly over the Bolsa Chica Ecological Reserve (BCER) and helicopters regularly land at a helipad over the BCER." (DEIR p. 2-10.) The DEIR uses this information to conclude that airshow-associated overflights would not adversely affect BCER because these ongoing activities have not 12-20

harmed wildlife. This description is inaccurate. While an oil company helipad is located adjacent to the Reserve, helicopter flights do not fly over the majority of BCER. These infrequent flights are coordinated with CDFW and travel only over a small portion of the southern tip of the Reserve. 12-20 (cont.)

Evidence submitted to the City and Operator demonstrates airshow-related disturbances of sensitive bird species documented by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, State Lands Commission, and California Coastal Commission. Even smaller and quieter aircraft have caused significant environmental impacts at BCER. 12-21

Additionally, while commercial and private aircraft may travel over the Reserve, such flights occur at much higher elevations than airshow-associated aircraft have traveled over the Reserve. Past airshow overflights occurred far below the 1,000-foot floor the DEIR claims will be used in the future, including some too low to be recorded by radar. Jets have been observed travelling 200 - 1,000 feet above BCER. 12-22

Moreover, the Project's unenforceable "request" to keep overflights more than 1,000 above ground level is insufficient. Airshow jets already disregard requests to avoid BCER. Preliminarily, a mere request is speculative and insufficient as CEQA mitigation. Mitigation measures that "are not guaranteed to occur at any particular time or in any particular manner" are inadequate. (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1119.) Beyond this, FAA Advisory Circular No. 91-36D, submitted to the City and Operator by the U.S. Fish and Wildlife Service, recommends full "[a]voidance of noise-sensitive areas." If that cannot occur, overflights should maintain an altitude of more than 2,000 feet above ground level. 12-23

d. Enforceable Mitigation Must be Incorporated into the Project to Avoid Impacts to the Bolsa Chica Ecological Reserve and Sensitive Species.

As a CEQA-compliant review of the Project will confirm that past airshows have included overflights of the Bolsa Chica Ecological Reserve, and that these overflights have had adverse impacts on sensitive wildlife and protected wetland habitat, the EIR must be revised to include enforceable mitigation. 12-24

These mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures." (Pub. Resources Code § 21081.6(b).) "The purpose of these requirements is to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." (*Federation of Hillside & Canyon v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261; *Katzeff v. California Dept. of Forestry and Fire Protection* (2010) 181 Cal.App.4th 601, 612; *Lincoln Place Tenants Assn v. City of Los Angeles* (2005) 130 Cal.App.4th 1491.)

The Project must be revised to include a condition prohibiting overflights of BCER, before and during the airshow. The DEIR contains a project objective described as: "Provide an event that reduces potential impacts to the surrounding sensitive habitat including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover." (ES-2.) A mitigation measure prohibiting BCER overflights supports this project objective by protecting BCER, California least terns, and western snowy plovers. 12-24 (cont.)

As previously commented by BCLT, Orange County is no stranger to implementing reasonable buffers on aircraft activity to minimize local impacts. John Wayne Airport's noise curfew, instituted to protect local residents from sleep disturbances, is one well-known example. The City must implement similarly reasonable buffers on aircraft activity over BCLT to prevent adverse impacts to wildlife.

V. Violations of the City's Noise Ordinance Must be Recognized as Significant.

While the DEIR admits the Project would exceed the City's noise ordinance, it quickly concludes that issuance of a Noise Deviation Permit will obviate the impact. However, this is not the intent of Municipal Code section 8.40. As the Project will violate the municipal code in a manner that cannot be fully mitigated, the EIR must conclude the Project will have a significant and unavoidable impact after incorporating all feasible mitigation. Only then can the City, separately, determine the benefits of the Project outweigh the harms, issue a Statement of Overriding Considerations, and consider a Noise Deviation Permit. 12-25

The Bolsa Chica Land Trust urges the City prohibit flyovers from the Airshow over the Bolsa Chica Ecological Reserve, and to work in good faith with

the managing agencies to ensure that the EIR is in compliance with CEQA and that no further impacts from future Airshows occur at BCER. 12-25 (cont.)

Sincerely,

Michelle Black

Enclosures

1. June 29, 2023 letter from Carstens, Black & Minteer, LLP
2. August 25, 2023 letter from California State Lands Commission and California Department of Fish and Wildlife
3. February 20, 2024 letter from California State Lands Commission and California Department of Fish and Wildlife
4. February 21, 2024 letter from California Coastal Commission
5. March 4, 2024 letter from California State Lands Commission re NOP
6. Federal Aviation Administration Advisory Circular No. 91-36D, dated September 17, 2004

Cc:

Mr. Andrew Willis, California Coastal Commission,
Andrew.Willis@coastal.ca.gov

Ms. Wendy Hall, M.S., California State Lands Commission,
wendy.hall@slc.ca.gov

Ms. Melissa Borde, California State Lands Commission,
Melissa.Borde@wildlife.ca.gov

EXHIBIT 1

CBM

Carstens, Black & Minteer LLP
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254
www.cbcearthlaw.com

Main Office Phone:
310 - 798-2400

Direct Dial:
310-798-2400 Ext. 5

Michelle N. Black
Email Address:
mnb@cbcearthlaw.com

June 29, 2023

Via Email *Al.Zelinka@surfcity-hb.org*, *Ashley.Wysocki@surfcity-hb.org*

Mr. Al Zelinka
City Manager
City of Huntington Beach
2000 Main Street
Huntington Beach, CA

Ms. Ashley Wysocki
Acting Community Services Director
City of Huntington Beach
2000 Main Street
Huntington Beach, CA

12-26

Re: Permitting of the Pacific Airshow, Huntington Beach
September 29 – October 1, 2023

Dear Mr. Zelinka and Ms. Wysocki,

Since 1992, the Bolsa Chica Land Trust (BCLT) has advocated for the preservation and restoration of Huntington Beach's Bolsa Chica Ecological Reserve. Threats to the Ecological Reserve and its sensitive plant and animal species are ongoing and include both long-term development and shorter-term special events, such as the Pacific Airshow, currently scheduled for September 29 - October 1, 2023. Past airshows have caused environmental damage documented by both BCLT and state wildlife agencies. In order to avoid future environmental harms while allowing a beloved event to go forward, BCLT urges the City to comply with the California Environmental Quality Act (CEQA) prior to issuing permits for the 2023 Pacific Airshow.

The City is required to comply with CEQA before approving any discretionary "project" that may result in a significant and adverse environmental impact. The Pacific Airshow's permits are "projects" under CEQA. As the City can decide whether or not to approve permits for the Pacific Airshow, and as the City can condition these permits, the issuance of permits for the airshow is a discretionary action under CEQA.

It is also clear that past Pacific Airshows have had significant adverse impacts on wildlife and habitat at the Bolsa Chica wetlands. Since CEQA requires preparation of an environmental impact report (EIR) whenever a project "may" cause a significant and adverse environmental effect, an EIR is required here. For example, the Pacific Airshow will clearly violate the City's noise ordinance, Municipal Code section 8.40. Thus, the event will have a significant and adverse impact on noise that requires preparation of an EIR.

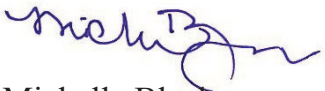
BCLT, wildlife agencies, and members of the public have documented myriad airshow impacts on biological resources that require evaluation, future avoidance, and mitigation under CEQA. State agencies have documented repeated, low aircraft passes over the wetlands, the startling noise of the jets, and repeated flushing of birds from the reserve. Affected birds included species of special concern. Others have registered concern about the proximity of the airshow jets to the oil infrastructure and the potential for a crash that could release toxic contaminants from the oil infrastructure into the wetlands. In 2022, the Army dropped streamers into the reserve. An EIR is required to disclose and analyze these likely and demonstrated environmental impacts, and to analyze alternatives that might avoid these impacts, as well as mitigation measures that can be adopted to reduce the airshow's impacts on the wetlands. 12-26 (cont.)

The City has acknowledged the applicability of CEQA to the Pacific Airshow in the past. On December 20, 2022, the City approved the hiring of an environmental consultant to conduct CEQA review of the 2024 airshow. The City can and must do the same for the 2023 airshow, which carries the same need for environmental compliance. To the extent the City has committed to hosting future airshows, prior to the completion of the CEQA review commissioned in December 2022, it has violated the Act. (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 135.)

Orange County is no stranger to implementing reasonable buffers on aircraft activity to minimize local impacts. John Wayne Airport's noise curfew, instituted to protect local residents from sleep disturbances, is one well known example. The City should implement similarly reasonable buffers on aircraft activity over the reserve to prevent adverse impacts to wildlife.

The Bolsa Chica Land Trust looks forward to the City's prompt compliance with CEQA in connection with the 2023 Pacific Airshow, and to its adoption of mitigation measures and conditions of permit approval that protect the Bolsa Chica wetlands and the residents of Huntington Beach. If the City does not prepare an EIR for the 2023 Pacific Airshow, it must at least implement interim mitigation measures to avoid impacts to Bolsa Chica.

Sincerely,



Michelle Black

12-26
(cont.)

Cc: Mr. Andrew Willis, California Coastal Commission, Andrew.Willis@coastal.ca.gov
Ms. Wendy Hall, M.S., California State Lands Commission, wendy.hall@slc.ca.gov
Ms. Melissa Borde, California Department of Fish and Wildlife,
Melissa.Borde@wildlife.ca.gov

EXHIBIT 2

DocuSign Envelope ID: 546BD703-6F32-49D5-8A10-5D773405B818

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

***Contact Phone:* 916.574.1900**

August 25, 2023

Sent via postal and E-mail (Michael.Gates@surfcity-hb.org)

Michael E. Gates
City Attorney
City of Huntington Beach
2000 Main Street
Huntington Beach, California

12-27

Subject: Huntington Beach Airshow – conditions to protect the Bolsa Chica Ecological Reserve

Dear Mr. Gates,

The California State Lands Commission (Commission) and California Department of Fish and Wildlife (CDFW) are jointly submitting this letter to address several concerns regarding the upcoming Huntington Beach Pacific Airshow scheduled for September 29th through October 1st, 2023.

As background, the Commission manages four million acres of sovereign tide and submerged lands, the beds of natural, navigable waterways including lakes and rivers, and school lands. The mission of the Commission is to provide the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care through preservation, restoration, enhancement, responsible economic development, and the promotion of public access. This stewardship of sovereign lands and natural resources is guided by the common law Public Trust Doctrine, the California Constitution, various laws, and regulations specific to the Commission, and statutory trust grants.

DocuSign Envelope ID: 546BD703-6F32-49D5-8A10-5D773405B818

The Commission owns approximately 1200 acres of sovereign lands in the Bolsa Chica Ecological Reserve (BCER). The Commission leases these lands to the CDFW for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of BCER.

Portions of the BCER contain active oil operations, including operating wells and pipelines maintained by California Resources Corporation. An aircraft accident in this area could create legal liability for the parties responsible, in addition to potentially causing ecological and human health and safety damage.

CDFW manages California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFW is responsible for the management of over 1.1 million acres of fish and wildlife habitat spanning over 700 properties statewide. These properties provide habitat for a rich diversity of fish, wildlife, and plant species and comprise habitats from every major ecosystem in the state. CDFW is responsible for regulatory enforcement and management of related recreational, commercial, scientific, and educational uses. 12-27 (cont.)

During the 2021 and 2022 airshow, several incidents occurred that caused disruptions in the normal behavior patterns of many bird species, including feeding and sheltering at Bolsa Chica Ecological Reserve. Disturbances included dropping streamers in the BCER, causing potential harm to wildlife and fire risk, and repeated low flyovers, which harassed the bird populations and caused them to take flight each time the airplanes flew over. This latter action is considered a "take" and is in violation of CCR T-14 251.1. Additionally, under Section 630 (17) of Title 14 "no aircraft operations are permitted in a reserve, and low flyovers are in violation". The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C 703-712). These also include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C 1531-1544), and the California Endangered Species Act of 1970 (FGC,1.5, 2050-2115.5). A few that depend heavily on the BCER include the Western snowy plover, Light-footed Ridgway's rail, Coastal California gnatcatcher, and the Belding's savannah sparrow.

In order to avoid a reoccurrence of these concerns this year for the 2023 airshow, we request compliance with the following conditions:

1. No flyovers will occur over BCER.
2. No streamers or any other debris will be dropped over the BCER.

DocuSign Envelope ID: 546BD703-6F32-49D5-8A10-5D773405B818

We would be happy to meet with you to discuss these concerns and reach a mutual concurrence on a protocol for the event that accommodates the airshow, while protecting the natural resources of BCER.

Please confirm receipt of this letter.

Sincerely,

DocuSigned by:
Wendy Hall
C23D6B9797F1445...

Wendy Hall
Environmental Program Manager
Special Projects Liaison
California State Lands Commission

DocuSigned by:
Tim Dillingham
18197A48BF3B4B6...

Tim Dillingham
Environmental Program Manager
Lands and Wildlife, South Coast Region
California Department of Fish & Wildlife

12-27 (cont.)

cc:

Michael E. Gates, Attorney, City of Huntington Beach
Al Zelinka, Manager, City of Huntington Beach
Ashley Wysocki, Deputy Director, Community & Library Services, City of Huntington Beach
Kevin Elliott, CEO, Code Four, Airshow, LLC
Gregory McDonald, Long Beach Front Line Manager, Federal Aviation Administration
Lucinda Calvo, Attorney IV, CA State Lands Commission

EXHIBIT 3

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

***Contact Phone:* 916.574.1900**

February 20, 2024

File ref: Lease 6616

Sent via postal and E-Mail (Eric.Parra@surfcity-hb.org)

Mr. Eric G. Parra
Interim City Manager
City of Huntington Beach
2000 Main Street
Huntington Beach, California 92648

12-28

Mr. Kevin Elliott
Chief Executive Officer
Code Four
5252 Bolsa Ave
Huntington Beach, CA 92649

SUBJECT: Required Application for Commission Authorization for the Operation and Maintenance of Huntington Beach Pier and Pacific Ocean AND Conditions to Protect the Bolsa Chica Ecological Reserve

Dear Mr. Parra and Mr. Elliott:

In 2023, the State Lands Commission (Commission) sent two letters to the city of Huntington Beach (City) and the event operator, Code Four prior to last year's Huntington Beach Pacific Airshow expressing concerns which were subsequently not addressed by either the City or Code Four. The letters are attached. These issues remain unresolved, and the Commission requests coordination with the City and Code Four to reach a mutually satisfactory resolution on these matters and to achieve a satisfactory approach for the conduct of future Pacific Airshows. Commission staff is aware of the Notice of Preparation/Initial Study the City has issued for an Environmental Impact Report

for the Airshow, and staff will send a separate CEQA comment letter as part of the CEQA process.

Required Application for Commission Authorization for the Operation and Maintenance of Huntington Beach Pier and Sovereign Land in the Pacific Ocean:

In 2023, the City permitted Code Four for an event known as the Huntington Beach Pacific Airshow that occurred in and around the Pacific Ocean, near and on the Huntington Beach Pier. This is to advise you that the activity constituted an unauthorized use of State land, under the jurisdiction of the California State Lands Commission (Commission), well outside of the City's current lease rights.

As a reminder, the Commission authorized Lease PRC 6616, a General Lease – Public Agency Use, to the City for the operation and maintenance of an existing public municipal pier (Huntington Beach Pier or Pier) and related concessions. That lease was authorized for a term of 25 years, beginning June 21, 2018.

Based on the information available, the 2023 event occurred for three days, from September 29th through October 1st, with airshow flights between 10:30 am to 4:30 pm, and a festival near the Huntington Beach Pier on all three days until 8:00 pm. Additionally, staff understands that the public Pier was closed to the general public on all three days of the event and that the event operator allowed access to the Pier through the purchase of a ticket sold by a private vendor. While staff were informed by the City that public access to the pier would still be available during the event, photographs of the pier during the event do not indicate that public access was provided. In addition, the event required the temporary placement of 16 large white buoys along a 12,000-foot line 500 feet offshore, as well as other buoys marking a "sterile aerobatic box" area, within the Commission's jurisdiction. This degree of restriction on public access and recreation along the beach and in the ocean, where boating was also restricted during the event, is not authorized by the City's lease. The lands waterward of the ordinary high-water mark remain ungranted sovereign lands under the management of the Commission.

12-28 (cont.)

As a reminder, the City's lease acknowledges that the Premises are subject to the Public Trust and are available to members of the public. Per Section 2, Paragraph 3 of the lease:

> "Lessee acknowledges that the Lease Premises are subject to the Public Trust and are presently available to members of the public for recreation,

waterborne commerce, navigation, fisheries, open space, and any other recognized Public Trust uses. Lessee also agrees that any proposed construction activities and subsequent use of the Lease Premises shall not unreasonably interfere with or limit Public Trust rights and shall do so only to the extent necessary to protect public health and safety during construction activities authorized by Lessor, or when imminent threats to public health and safety are present."

The closure of the Pier to the general public requires Commission authorization. An application for Commission authorization is urgently required to avoid continued violations of the lease and unauthorized use for future proposed events.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. Please note that applications can take a minimum of six months to process and schedule for consideration. We encourage the City to complete and submit an application as soon as possible. The Online Application will require the City to provide the following (at a minimum):

12-28 (cont.)

- Copies of all currently approved or in process permits for the event with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A description of the closure, impacts, and timeline of the event.
- An Approximate Expense Deposit for application review and processing.
- Photos or diagrams showing where the closure of the pier begins.

Required Application for Lease from Event Operator, Code Four:

Airshow activities described above, including those occurring on and over the water (e.g., placement of buoys, etc.) and on the portions of the Pier that stand on land waterward of the ordinary high-water mark, also require Code Four to obtain Commission authorization.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. Please note that applications can take a minimum of six months to process and schedule for consideration. We encourage you to complete and submit an application as soon as possible. The Online Application will require you to provide the following (as a minimum):

- Copies of all currently approved or in process permits with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A drawing of the existing activity area, including all dimensions and proposed improvements.
- Specific location information on placement of marker buoys.
- Specific location information on placement of temporary airstrips/helipads and any other potential encroachments and activities waterward of, or adjacent to the ordinary high-water mark.
- An Approximate Expense Deposit for application review and processing.

If you fail to apply to the Commission for a lease, as codified in California Public Resources Code sections 6224.3 and following, trespassing structures (including but not limited to buoys) may be subject to administrative enforcement. After an administrative enforcement action, the Commission may impose penalties of up to $1,000 per day until a lease is obtained or the structures are removed. 12-28 (cont.)

Conditions to Protect the Bolsa Chica Ecological Reserve:

The Commission owns approximately 1200 acres of sovereign lands in the Bolsa Chica Ecological Reserve (BCER). The Commission leases these lands to the California Department of Fish and Wildlife (CDFW) for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of BCER.

Portions of the BCER contain active oil operations, including operating wells and pipelines maintained by California Resources Corporation. An aircraft accident in this area could create legal liability for the parties responsible, in addition to potentially causing ecological and human health and safety damage.

CDFW is responsible for the daily on-site management of the BCER, which provides habitat for a rich diversity of fish, wildlife, and plant species, including many listed and special status species. The department is also responsible for regulatory enforcement and management of related recreational, commercial, scientific, and educational uses.

During the 2023 airshow, repeated low flyovers by the airshow jets caused disruptions in the normal behavior patterns of many bird species, including

feeding and sheltering at BCER. These repeated low flyovers harassed the bird populations and caused them to take flight each time the airplanes flew over. This action is considered a "take" and is in violation of California Code of Regulations, title 14, section 251.1. Additionally, under sections 550, 630 (18), and 632 (121), (122) of title 14, no aircraft operations are permitted in a reserve, and low flyovers are in violation. The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C §§ 703-712). These also include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C §§ 1531-1544), and the California Endangered Species Act of 1970 (Fish & G. Code, Ch. 1.5, §§ 2050-2115.5). A few that depend heavily on the BCER include the Western snowy plover, Light-footed Ridgway's rail, Coastal California gnatcatcher, and the Belding's savannah sparrow.

12-28 (cont.)

We request your cooperation and compliance in these matters and urge the City to contact the Commission to:

1) As described above, submit a lease application immediately or contact our office for a meeting to discuss. If you have any questions, please contact either Ken Foster at (916) 574-2555 or by email at kenneth.foster@slc.ca.gov or Kelly Connor at (916) 574-0343 or by email at kelly.connor@slc.ca.gov.
2) Impose conditions on approvals for the 2024 Airshow and future events which disallow any flights directly over the BCER. If you have any questions, please contact Wendy Hall at (916)-574-0994 or wendy.hall@slc.ca.gov.

Sincerely,

Brian Bugsch
Chief, Land Management Division

cc: see next page

cc: Michael Gates, City Attorney, City of Huntington Beach
Seth Blackmon, CLSC Legal Division
Warren Crunk, CSLC Legal Division
Lucinda Calvo, CSLC Legal Division
Ken Foster, CSLC Land Management Division
Kelly Connor, CSLC Land Management Division
Wendy Hall, CSLC Executive Division

Attachments

12-28
(cont.)

DocuSign Envelope ID: 9511873C-C2B5-494D-896D-AA147C62AE82

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

***Contact Phone:* 916.574.1900**

August 10, 2023

File ref: Lease 6616

Sent via postal and E-Mail (Michael.Gates@surfcity-hb.org)

Michael E. Gates
City Attorney
City of Huntington Beach
2000 Main Street
Huntington Beach, California 92648

12-29

SUBJECT: Required Application for an Amendment of Lease PRC 6616, a General Lease – Public Agency Use for the Operation and Maintenance of Huntington Beach Pier

Dear Mr. Gates:

Our records indicate that that the City has permitted an operator for an event known as the Huntington Beach Pacific Airshow that will occur in and around the Pacific Ocean, near and on the Huntington Beach Pier. This is to advise you that the proposed activity constitutes an unauthorized use of State land, under the jurisdiction of the California State Lands Commission (Commission), well outside of the City's current lease rights.

As a reminder, the Commission authorized Lease PRC 6616, a General Lease – Public Agency Use, to the City of Huntington Beach (City) for the operation and maintenance of an existing public municipal pier (Huntington Beach Pier or Pier) and related concessions. That lease was authorized for a term of 25 years, beginning June 21, 2018. Staff has become aware that a proposed event, the Huntington Beach Pacific Airshow, will utilize the Pier.

Based on the information available, the proposed event will occur for three days, from September 29th through October 1st, will have airshow flights

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between 10:30 am to 4:30 pm, and a festival near the Huntington Beach Pier on all three days until 8:00 pm. Additionally, staff understands that the public Pier will be closed to the general public on all three days of the event and that the event operator will only allow access to the Pier through the purchase of a ticket sold by a private vendor. The event requires temporary placement of 16 large white buoys along a 12,000-foot line 500 feet offshore, as well as other buoys marking a "sterile aerobatic box" area, within the Commission's jurisdiction. This degree of restriction on public access and recreation along the beach and in the ocean, where boating will also be restricted, during the event is not authorized by the City's lease. The lands waterward of the ordinary high-water mark remain ungranted sovereign lands under the management of the Commission.

As a reminder, the City's lease acknowledges that the Premises are subject to the Public Trust and are available to members of the public. Per Section 2, Paragraph 3 of the lease:

> "Lessee acknowledges that the Lease Premises are subject to the Public Trust and are presently available to members of the public for recreation, waterborne commerce, navigation, fisheries, open space, and any other recognized Public Trust uses. Lessee also agrees that any proposed construction activities and subsequent use of the Lease Premises shall not unreasonably interfere with or limit Public Trust rights and shall do so only to the extent necessary to protect public health and safety during construction activities authorized by Lessor, or when imminent threats to public health and safety are present."

12-29 (cont.)

The closure of the Pier to the general public requires Commission authorization through the form of an amendment to the lease. An application for a lease amendment is urgently required for the proposed event.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. We encourage the City to complete and submit an application as soon as possible. The Online Application will require the City to provide the following (at a minimum):

- Copies of all currently approved or in process permits for the event with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A description of the closure, impacts, and timeline of the event.
- Photos or diagrams showing where the closure of the pier begins.

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We request your cooperation in this matter and urge the City to submit a lease application immediately or contact our office for a meeting to discuss. If you have any questions, please contact either Ken Foster at (916) 574-2555 or by email at kenneth.foster@slc.ca.gov or Kelly Connor at (916) 574-0343 or by email at kelly.connor@slc.ca.gov.

12-29 (cont.)

Sincerely,

DocuSigned by:
Seth Blackmon
D4AAC71802234D2...

Seth Blackmon
Chief Counsel, Legal Division

cc: Al Zelinka, City Manager, City of Huntington Beach
Warren Crunk, CSLC Legal Division
Lucinda Calvo, CSLC Legal Division
Ken Foster, CSLC Land Management Division
Kelly Connor, CSLC Land Management Division

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CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

***Contact Phone:* 916.574.1900**

August 10, 2023

Sent via postal and E-Mail (info@pacificairshow.com)

Pacific Airshow, LLC
5252 Bolsa Avenue
Huntington Beach, CA 92649

12-30

SUBJECT: State Lands Lease Required for the Proposed Pacific Airshow in the Pacific Ocean, Huntington Beach, Orange County

Dear Pacific Airshow, LLC:

Our records indicate that you are the planned operator of the Huntington Beach Pacific Airshow that will occur in and along the Pacific Ocean, near and on the Huntington Beach Pier. This is to advise you that the proposed activity will occupy State land under the jurisdiction of the California State Lands Commission (Commission).

As general background, the Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code §§ 6009, 6009.1, 6301, and 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit

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of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court decision. Such boundaries may not be readily apparent from present day site inspections

Additionally, please be advised that the Pacific Ocean is subject to the Public Right of Navigation. This right provides that the public may navigate and exercise the incidents of navigation in a lawful manner. Such uses may include, but are not limited to, boating, fishing, hunting, swimming, bathing, standing, wading along the waterfront, anchoring, picnicking, bird watching, and nature study (*People ex rel. Baker v. Mack* (1971) 19 Cal.App.3d 1040). Events and activities are not allowed to restrict or impede the navigation and recreational rights of the public except under limited circumstances, and only with the advance approval and authorization of the Commission. 12-30 (cont.)

Based on the information available, staff understands that the proposed event will occur for three days, from September 29th through October 1st, will have airshow flights between 10:30 am to 4:30 pm, and festival near the Huntington Beach Pier on all three days until 8:00 pm. Additionally, staff understands that the public Huntington Beach Pier will be closed to the public on all three days of the event. There will also be restricted public recreational access along the beach and in the ocean during the event, and boating in the area will be restricted. Moreover, the event requires temporary placement of 16 large white buoys along a 12,000-foot line 500 feet offshore, as well as other buoys marking a "sterile aerobatic box" area, within the Commission's jurisdiction. You are therefore required to obtain a lease from the Commission for the use of State land.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. We encourage you to complete and submit an application as soon as possible. The Online Application will require you to provide the following (as a minimum):

- Copies of all currently approved or in process permits with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A drawing of the existing activity area, including all dimensions and proposed improvements.

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If you fail to apply to the Commission for a lease, as codified in California Public Resources Code sections 6224.3 and following, trespassing structures may be subject to administrative enforcement. After an administrative enforcement action, the Commission may impose penalties of up to $1,000 per day until a lease is obtained or the structures are removed.

We request your cooperation in this matter and urge you to submit a lease application immediately or contact our office for a meeting to discuss. If you have any questions, please contact either Ken Foster at (916) 574-2555 or by email at kenneth.foster@slc.ca.gov or Kelly Connor at (916) 574-0343 or by email at kelly.connor@slc.ca.gov.

12-30 (cont.)

Sincerely,

DocuSigned by:
Seth Blackmon
D4AAC71802234D2...

Seth Blackmon
Chief Counsel, Legal Division

cc: Warren Crunk, Legal Division
Lucinda Calvo, Legal Division
Ken Foster, Land Management Division
Kelly Connor, Land Management Division

EXHIBIT 4

CALIFORNIA COASTAL COMMISSION
South Coast Area Office
301 E. Ocean Blvd, Suite 300
Long Beach, CA 90802-4302
(562) 590-5071

February 21, 2024

Mr. Michael Gates
City Attorney
City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

Mr. Eric G. Parra
Interim City Manager
City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

Mr. Kevin Elliott
Chief Executive Officer
Code Four
5252 Bolsa Ave
Huntington Beach, CA 92649

12-31

Re: October 2023 Pacific Air Show's Privatization of Public Land and Waters in Huntington Beach Without a Requisite Coastal Development Permit

Dear Addressees:

This letter is written to you regarding the October 2023 Pacific Air Show ("the air show"), which is annually authorized by the City of Huntington Beach ("the City") and organized by Code Four. Coastal Commission ("Commission") staff has confirmed that at 2023's air show, and others in previous years, sizeable private bleacher seating was constructed along the shoreline between the Huntington Beach Pier southward to approximately Beach Boulevard, members of the public were prohibited from crossing the shoreline and accessing state tidelands seaward of the bleacher seating, and public access to the entirety of the Huntington Beach pier was blocked for the exclusive private use of ticket purchasers throughout the duration of the event.[1] Commission staff has also confirmed that significant fees were charged for vehicular and RV access to the City's beach parking lots leading up to and during the airshow.[2]

Prior to and after the 2023 air show, Commission staff sent several emails and letters to representatives from the City's Department of Community and Library Services on July 26, 2023, August 7, 2023, and October 13, 2023, raising Commission staff's questions and potential concerns regarding unpermitted privatization of public land at the 2023 air show, which will be discussed in further detail below, and our desire to meet with the City to discuss. Unfortunately, Commission staff never received a substantive response from the City addressing the concerns or demonstrating a willingness to meet and discuss further.

[1] Please see Exhibit 1 for reference.
[2] Please see Exhibit 2 for reference.

Please know that Commission staff understands the popularity of this annual event within the Huntington Beach and greater Orange County communities, as well as the economic benefits that such events can produce for local businesses and coastal cities with limited financial resources. Given that context, Commission staff would like to work with the City to appropriately authorize the event and address Commission staff's concerns regarding the 2023 and potential future air show's privatization of public land on Huntington City Beach, state tidelands at and below the mean high tide line ("MHTL"), and the Huntington Beach Pier without a requisite coastal development permit ("CDP"). As such, each concern will be discussed separately in further detail below.

Partial Closure of State Tidelands and State Waters

Commission staff has confirmed that during the October 2023 Airshow: (1) buoys were placed in the ocean south of the Huntington Beach pier to prevent the public from entering and accessing state waters; and (2) fencing and air show personnel were stationed near the shoreline adjacent to the private bleacher seating to prevent the public from accessing adjacent state tidelands.

Commission staff understands that the City has permitting authority over the area of the beach landward of the MHTL. However, the City's Coastal Element, which is part of its certified LCP, provides that the City's LCP policies only apply to the geographic portion of the City that falls within the coastal zone. As such, state tidelands and portions of the Huntington Beach Pier at and below the MHTL remain under the Commission's retained permit jurisdiction. See Section 245.06.B.1 of the City's LCP Implementation Plan ("IP")[3] and Coastal Act Section 30519(b)[4]. Furthermore, Section 245.06 of the City's Municipal Code states:

12-31 (cont.)

> *The Coastal Commission's original permit jurisdiction includes all tidelands, submerged lands, or public trust lands whether filled or unfilled unless the Coastal Commission has delegated original permit jurisdiction to the City for areas potentially subject to the public trust but which are determined by the Coastal Commission to be filled, developed, and committed to urban use pursuant to Section 30613 of the Coastal Act.* ***Development located in the Coastal Commission's original permit jurisdiction requires approval of a Coastal Development Permit issued by the Coastal Commission in accordance with the procedure as specified by the California Coastal Act.*** [emphasis added]

In addition, under well-settled state law, the State of California (acting by and through the California State Lands Commission ("SLC")) owns the tidelands and submerged lands seaward of the MHTL, and these tidelands are held in public trust for the public. Article X, Section 4 of the California State Constitution states:

---

[3] LCP IP Section 245.06.B1 states: Coastal Permit Issued by the Coastal Commission. Developments on tidelands, submerged lands, or navigable waterways require a permit issued by the California Coastal Commission in accordance with the procedure as specified by the California Coastal Act.

[4] Coastal Act Section 30519(b) states: Subdivision (a) shall not apply to any development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone, nor shall it apply to any development proposed or undertaken within ports covered by Chapter 8 (commencing with Section 30700) or within any state university or college within the coastal zone; however, this section shall apply to any development proposed or undertaken by a port or harbor district or authority on lands or waters granted by the Legislature to a local government whose certified local coastal program includes the specific development plans for such district or authority.

> ***No individual, partnership, or corporation, claiming or possessing the frontage of tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this state shall be permitted to exclude the right of way to such water whenever it is required for public purpose, nor to destroy or obstruct free navigation of such waters; the Legislature shall enact such as will give the most liberal construction of this provision so that access to the navigable waters of this State shall always be attainable for the people thereof.*** [emphasis added]

Although components of the October 2023 air show within the City's permit jurisdiction may qualify as a temporary event per the City's certified LCP and, thus, may be exempt from CDP requirements, this exemption does not grant the City and/or Code Four the authority to prohibit public access to state tidelands at and below the MHTL at any portion of Huntington City Beach without proper authorization from the Commission.

Partial Closure of Huntington City Beach and Construction of Private Bleacher Seating

As stated above, Commission staff has confirmed that sizeable private bleacher seating was constructed along the shoreline between the Huntington Beach Pier southward to approximately Beach Boulevard. Commission staff has also confirmed that individual ticket prices listed on the air show's website to access Huntington City Beach between the pier and approximately Beach Boulevard during the event varied between $25 and $299, and group seating prices between $1,990 and $4,950 depending on the specific type of seating and accommodations.[5] 12-31 (cont.)

The City's certified LCP generally allows temporary events without a CDP if they meet certain criteria per Section 245.08.H of the City's LCP, Implementation Plan ("IP"), and zoning code. However, the City's Downtown Specific Plan ("DSP"), which is also part of the City's LCP IP, and supersedes the City's zoning codes in specific designated areas of Huntington Beach per the City's Coastal Element, requires a CDP for any beach closure in the downtown area. Specifically, the City's DSP Section 3.3.7.15 includes the following requirement regarding the beach area:

> ***Closure to public use of any portion of the beach inland of the mean high tide line is not encouraged and requires a coastal development permit which must maintain the public's right to gain access to State tidelands.*** *Measures that limit public use of the beach shall be limited to those necessary to address documented public safety events that cause a risk or hazard to the general public and shall be the minimum necessary to address the potential risk or hazard to the general public. The need for continuation of safety measures that limit public access shall be reassessed on a periodic basis to assure maximum public access is provided. Limited closure for beach maintenance may be allowable pursuant to a coastal development permit.* [emphasis added]

Commission staff notes that Section 245.08 of the City's Municipal Code exempts certain temporary events from CDP requirements. Temporary events include "exclusive use of a sandy beach, parkland, filled tidelands, water, streets or parking area which is otherwise open and available for general public use." "Exclusive use" is defined as:

[5] Please see Exhibit 2 for reference.

> *A use that precludes use in the area of the event for public recreation, beach access or access to coastal waters other than for or through the event itself. Sandy beach area includes publicly owned and privately owned sandy areas fronting on coastal waters, regardless of the existence of potential prescriptive rights or a public trust interest. Coastal resources include, but are not limited to, public access opportunities, visitor and creational facilities, water-oriented activities*[.]

As stated above, construction of the private bleacher seating on Huntington City Beach and limiting access to this portion of the beach for ticket purchasers occurred without a CDP in violation of the public access protection policies set forth in the City's DSP Section 3.3.7.15. Again, it is Commission staff's position that DSP Section 3.3.7.15 establishes separate and specific requirements for the downtown beach area that supersede other temporary events exemptions that may otherwise be authorized in this jurisdiction. Commission staff also understands the City may be concerned that the public was excluded from these portions of state tidelands and state waters due to safety risks associated with the air show, but despite these concerns, such measures that restrict access to state waters and tidelands require Commission authorization.

Complete Closure of Huntington Beach Pier

Commission staff has also confirmed that the entirety of the public municipal Huntington Beach pier ("the pier") was closed off with fencing and regulated by air show personnel for the exclusive use of air show ticket purchasers leading up to and during the event. Tickets to access the pier during the air show were listed on the event's website for $50 to $75 per day.[6] As referenced above, Section 245.06.B of the City's LCP IP and Section 30519(b) of the Coastal Act provide that the Commission retains permit issuing authority over development undertaken on state tidelands, which includes portions of the pier at and seaward of this designation. In addition, the City's Lease No. PRC 6616.1 ("the lease") with the SLC imposes certain Public Trust and contractual obligations on the City regarding public access to the pier, commercialization of the pier, and pier closures. The lease premises includes all portions of the pier from Boundary Line Agreement 84 and the 1955 MHTL designation seaward.[7]

12-31 (cont.)

Special Provision 3 of the lease provides that:

> *Lessee (the City) acknowledges that the Lease Premises are subject to the Public Trust and are presently available to members of the public for recreation, waterborne commerce, navigation, fisheries, open space, and any other recognized Public Trust uses.* ***Lessee also agrees that any proposed construction activities and subsequent use of the Lease Premises shall not unreasonably interfere with or limit Public Trust rights and shall do so only to the extent necessary to protect public health and safety during construction activities authorized by Lessor, or when imminent threats to public health and safety are present.*** [emphasis added]

General Provision 5(g) provides that "use of the Lease Premises for commercial purposes; conducting a business, whether for profit or otherwise; and any subleasing, rental, or any transaction

[6] Please see Exhibit 3 for reference.
[7] Please see Exhibit 4 for reference.

whereby Lessee directly or indirectly receives compensation from a third party in exchange for use of the Lease Premises shall constitute an immediate Default of this lease with no cure period."

General Provision 6(a)(3) provides that "Lessor (SLC) expressly reserves to the public an easement for convenient access across the Lease Premises and a right of reasonable passage across and along any right-of-way granted by this Lease[.]"

General Provision 6(e) provides that "Lessee (the City) shall have the right to exclude persons from the Lease Premises only when their presence or activity constitutes a material interference with the Lessee's use and enjoyment of the Lease Premises."

Closure of the pier for the private benefit of air show ticket purchasers throughout the duration of the event unreasonably interferes with and limits public trust rights per Special Provision 3 of the lease. Further, this closure was clearly not intended to protect public health and safety during construction related activities per General Provision 6(a)(3), nor did the public's presence on the pier during the air show constitute a material interference with the City's use and enjoyment of the lease premises per General Provision 6(e).

These same concerns regarding the October 2023 air show's unauthorized use of the pier were stated in a letter from SLC to City Attorney Mr. Michael Gates on August 10, 2023. In that letter, SLC requested that the City apply for a lease amendment to utilize the pier in such a private commercial manner during the airshow. Unfortunately, the City never responded to SLC's letter and did not apply for a requisite lease amendment. As such, Commission staff has communicated with SLC, and both agencies have determined that the October 2023 air show's unpermitted closure and privatization of the pier constitutes a breach of the above-mentioned conditions of the lease. 12-31 (cont.)

Finally, as stated above, the October 2023 airshow prohibited public access to the entirety of the pier throughout the duration of the event, including portions of the pier at and beyond the MHTL, which falls under the Commission's retained jurisdiction. This closure did not receive the necessary authorization from the Commission, and, thus, constitutes a violation of the public access protection policies of the Coastal Act.

Increase in City Beach RV Parking Lot Rates

As stated above, Commission staff has confirmed that RV camping spots in City beach parking lots were sold for $4,500 to camp between Thursday, September 28 and Monday, October 2, 2023. This adjustment was a 1,630% to 1,025% increase in RV camping spot rates as the City normally only charges between $65 and $100 per night depending on the reservation.[8] Please note that the City's DSP Section 3.3.7.15 provides:

> *Public beaches and parks shall maintain lower-cost user fees and parking fees, and maximize hours of use to the extent feasible, in order to maximize public access and recreation opportunities.* ***Limitations on time of use or increases in user fees or parking fees shall be subject to coastal development permit requirements in accordance with Chapter 245 of the HBZSO.***

[8] Please see Exhibit 5 for reference.

> ***The implementation of restrictions on public parking along public streets with the potential to impede or restrict public access to beaches, trails or parklands, (including, but not limited to, the posting of "no parking" signs, red curbing, physical barriers and preferential parking programs) shall be prohibited except where such restrictions are needed to protect public safety and where no other feasible alternative exists to provide public safety.***
>
> *Public recreation and access opportunities at public beaches and parks shall be protected, and where feasible, enhanced as an important coastal resource . . .* ***All beach amenities available to the general public on the City's public beaches (including those owned and operated by the City and the State) shall be available to all members of the public on an equal basis.*** [emphasis added]

As such, the City's authorization of the substantial increase in RV camping rates during and throughout the air show discussed above contradicts Section 3.3.7.15 of the City's DSP, which, in part, requires lower-cost parking fees at the City's public beaches. Again, please note that the City's DSP supersedes the City's IP or zoning code for development conducted within the Huntington Beach downtown area per the City's Coastal Element, which includes the City beach parking lots. Further, it is assured that many, if not most, of the public is not able to afford such rate increases to access this popular beach amenity, which is supported and maintained by taxpayer dollars.

12-31 (cont.)

Potential Changes to Flight Patterns to Avoid Bolsa Chica Ecological Reserve

Through this letter Commission staff would also like to address significant environmental concerns related to flight paths during the air show. Commission staff received a copy of the June 29, 2023, letter from Carstens, Black & Minteer, LLP representing the Bolsa Chica Land Trust, to the City which raises concerns regarding threats to the wildlife and habitat of the Bolsa Chica Ecological Reserve stemming from the airshow. Commission staff has also received a copy of City Attorney Mr. Michael Gates's July 11, 2023, response to that letter.

The City's IP states that the Director of Community Development, or the City Council through direction to the director of Community Development, may determine that a temporary event shall be subject to CDP review, even if the criteria set forth in Section 3 are not met, if the Director or City Council determines that unique or changing circumstances exist relative to a particular temporary event that have the potential for significant adverse impacts on coastal resources. Such circumstances include situations where the event and its associated activities or access requirements will either directly or indirectly impact environmentally sensitive habitat areas, rare or endangered species, significant scenic resources, or other coastal resources as described in Section 2. As stated in the Bolsa Chica Land Trust's letter, as well as in an August 10, 2023 letter emailed to the City, Code Four, and the Federal Aviation Administration ("FAA") from SLC and the California Department of Fish and Wildlife ("CDFW"), and in another email sent to the City and Code Four from the United States Fish and Wildlife Service ("USFWS"), airshows have the potential for significant adverse impacts on local coastal resources, including but not limited to, low aircraft passing over the wetlands and the startling noise of jets causing flushing of rare and endangered species of birds from the Bolsa Chica Ecological Reserve. Furthermore, the proximity of the airshow jets to neighboring oil infrastructure and potential for a crash could release contaminants from the oil infrastructure into the wetlands. As such, this potential for significant adverse impacts to local coastal resources triggers the City to review the airshow per the City's IP, and to consider

both alternative flight routes and altitude requirements, regardless of whether the airshow qualifies as a discretionary or ministerial project per the California Environmental Quality Act ("CEQA"). We ask that the City work with SLC and CDFW and other relevant regulatory agencies to review alternative flight routes and altitude requirements in order to best protect wildlife and wildlife habitat for protected species at the Bolsa Chica Ecological Reserve.

Request for Additional Information

Through this letter, to better understand the operational roles of the parties involved, and to help explore options for resolution, Commission staff is also requesting copies of both the City's operating agreement with Code Four for the air show, and the fully executed settlement agreement (not an executive summary) between both parties reached in *Pacific Airshow, LLC v. City of Huntington Beach*. It appears that these would be public documents available for disclosure under the California Public Records Act and Commission staff expects they will be released to help us determine a mutually desirable outcome.

Resolution

Commission staff would like to reiterate that it is not the intent of this letter, or any subsequent meetings between the City, Commission staff, and other involved parties to prohibit future air shows from taking place in Huntington Beach. However, the October 2023 air show's widespread unpermitted privatization of public land discussed in this letter is not compliant with the City's certified LCP, violates public access protection policies of the Coastal Act, and breaches contractual obligations of the City's lease with SLC. As such, to avoid future activities that might expose the City and Code Four to formal enforcement action(s), Commission staff is requesting a meeting with all parties involved to ensure that future air shows may continue operating in a manner compliant with all relevant statutory and contractual requirements. Please contact me via email at spenser.sayre@coastal.ca.gov by **March 5, 2024**, to schedule a meeting and discuss. 12-31 (cont.)

Sincerely,



Spenser Sayre, Esq.
South Coast District Enforcement

Cc: **Kate Huckelbridge, Executive Director, CCC**
Karl Schwing, Deputy Director, CCC
Lisa Haage, Chief of Enforcement, CCC
Andrew Willis, Enforcement Counsel, CCC
Meg Vaughn, Coastal Program Analyst, CCC
Wendy Hall, Environmental Program Manager, California State Lands Commission
Kelly Connor, Public Land Management Specialist III, California State Lands Commission
Lucinda Calvo, Senior Attorney, California State Lands Commission

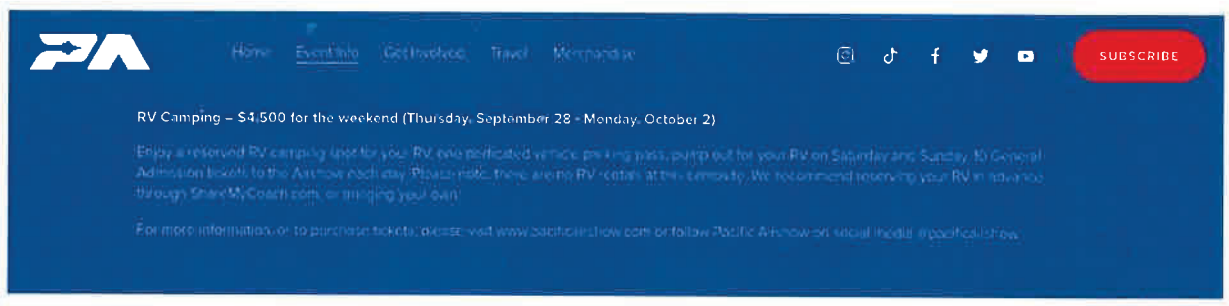
EXHIBIT 1





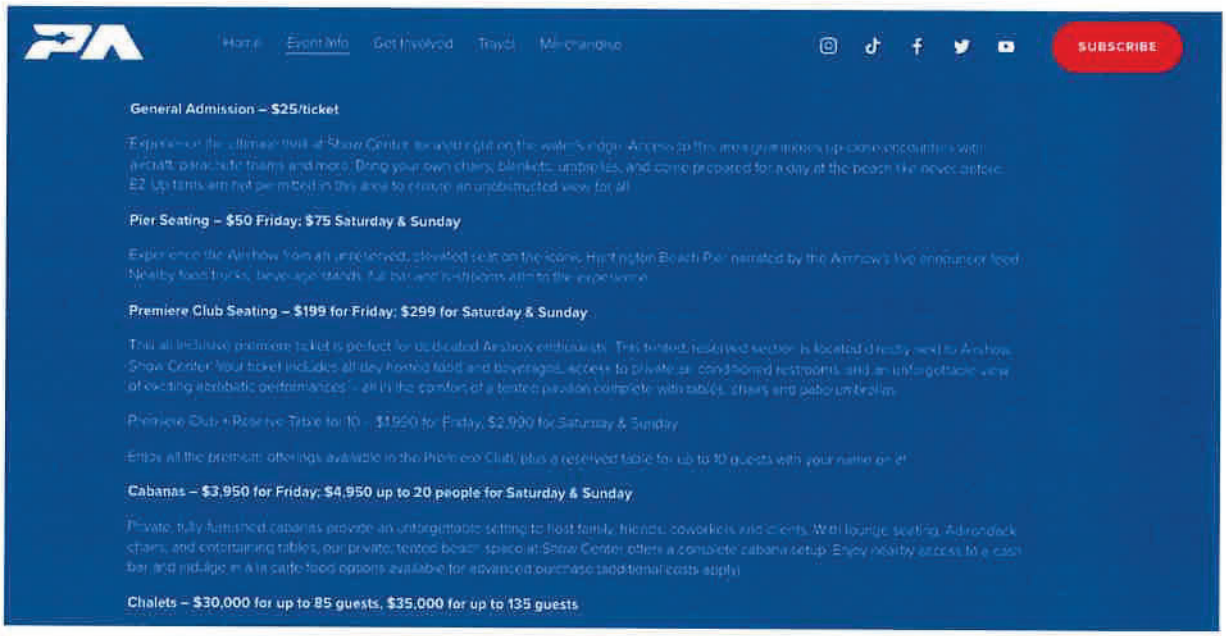
12-31
(cont.)

EXHIBIT 2



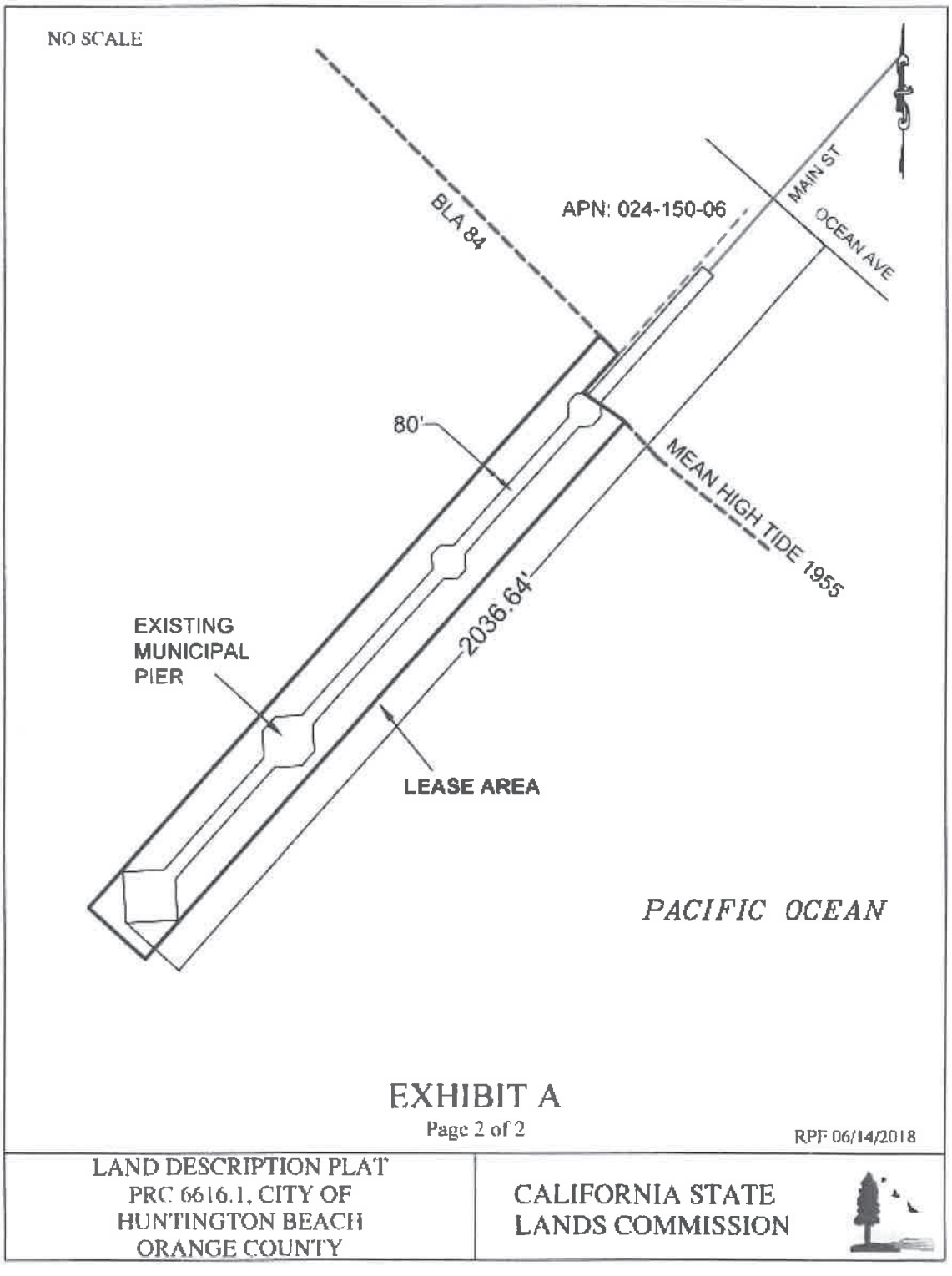
12-31 (cont.)

EXHIBIT 3



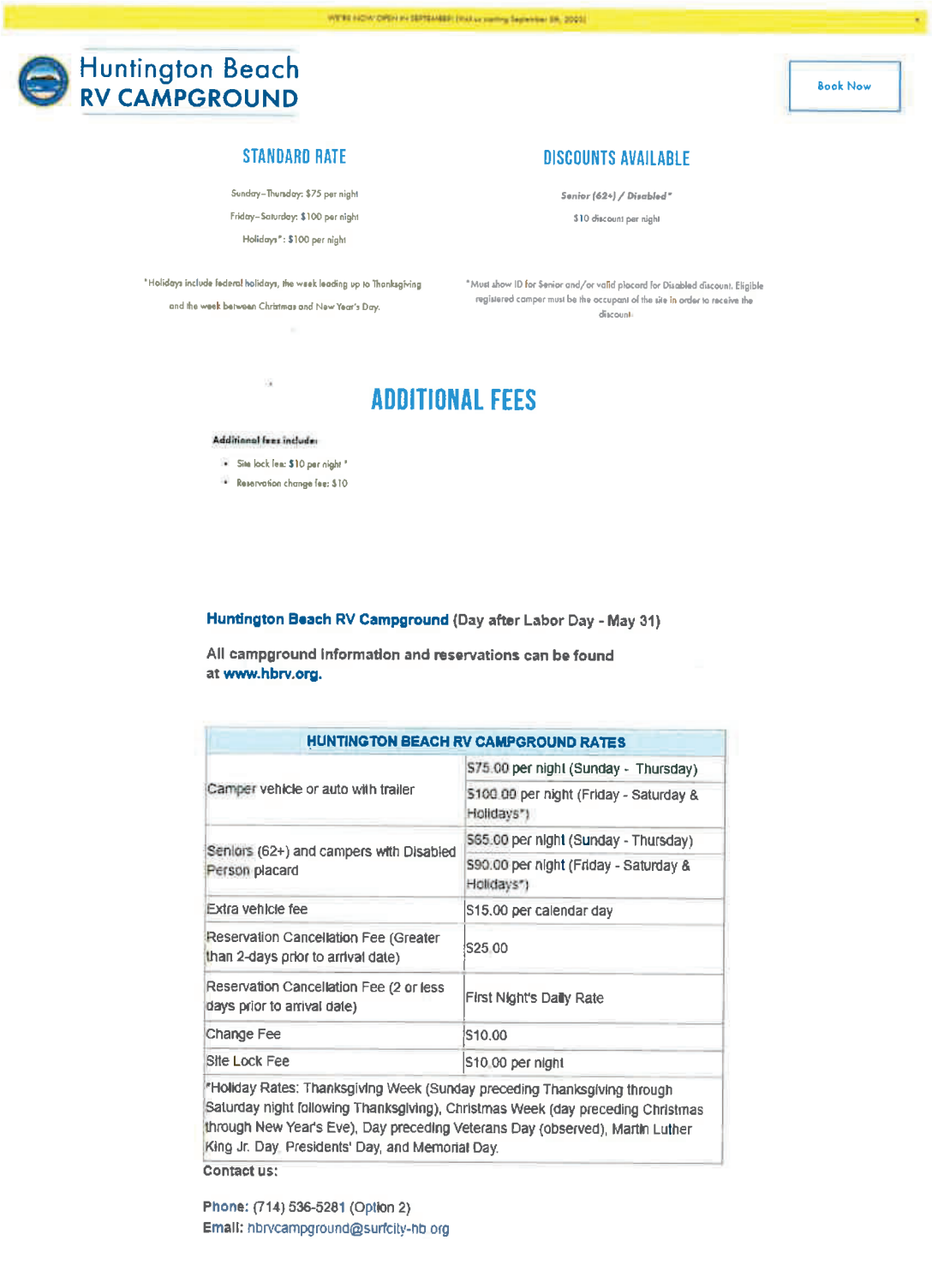
12-31
(cont.)

EXHIBIT 4



12-31
(cont.)

EXHIBIT 5



WE'RE NOW OPEN IN SEPTEMBER! Visit us starting September 5th, 2020!

Huntington Beach RV CAMPGROUND

Book Now

STANDARD RATE

Sunday–Thursday: $75 per night

Friday–Saturday: $100 per night

Holidays*: $100 per night

*Holidays include federal holidays, the week leading up to Thanksgiving and the week between Christmas and New Year's Day.

DISCOUNTS AVAILABLE

*Senior (62+) / Disabled**

$10 discount per night

*Must show ID for Senior and/or valid placard for Disabled discount. Eligible registered camper must be the occupant of the site in order to receive the discount.

ADDITIONAL FEES

Additional fees include:

- Site lock fee: $10 per night *
- Reservation change fee: $10

Huntington Beach RV Campground (Day after Labor Day - May 31)

All campground information and reservations can be found at **www.hbrv.org.**

HUNTINGTON BEACH RV CAMPGROUND RATES	
Camper vehicle or auto with trailer	$75.00 per night (Sunday - Thursday)
	$100.00 per night (Friday - Saturday & Holidays*)
Seniors (62+) and campers with Disabled Person placard	$65.00 per night (Sunday - Thursday)
	$90.00 per night (Friday - Saturday & Holidays*)
Extra vehicle fee	$15.00 per calendar day
Reservation Cancellation Fee (Greater than 2-days prior to arrival date)	$25.00
Reservation Cancellation Fee (2 or less days prior to arrival date)	First Night's Daily Rate
Change Fee	$10.00
Site Lock Fee	$10.00 per night
*Holiday Rates: Thanksgiving Week (Sunday preceding Thanksgiving through Saturday night following Thanksgiving), Christmas Week (day preceding Christmas through New Year's Eve), Day preceding Veterans Day (observed), Martin Luther King Jr. Day, Presidents' Day, and Memorial Day.	

Contact us:

Phone: (714) 536-5281 (Option 2)
Email: hbrvcampground@surfcity-hb.org

12-31 (cont.)

EXHIBIT 5

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
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Contact Phone: 916.574.1900

March 4, 2024

File Ref: SCH # 2024020006

Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648
connor.hyland@surfcity-hb.org

Subject: Notice of Preparation for a Draft Environmental Impact Report for the Pacific Airshow Huntington Beach Project, Orange County

12-32

Dear Connor Hyland,

The California State Lands Commission (Commission) staff has reviewed the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Pacific Airshow Huntington Beach (Project or Airshow), which is being prepared by the City of Huntington Beach (City). The City, as the public agency that must issue a permit for the Project through their Specific Event Permit Process, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). Pacific Airshow LLC is applying for the permit and is proposing to carry out the Project. The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency. Commission staff requests that the City consult with us on preparation of the DEIR as required by CEQA section 21153, subdivision (a) and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

Staff contacted the City and event operator by letter in August 2023 (see attached 2023 letter) regarding the requirement for a Commission lease or lease amendment for the use of sovereign lands for the 2023 Airshow, as well as concerns regarding Airshow impacts on the Bolsa Chica Ecological Reserve

(BCER), which is owned and managed by the Commission. In February 2024, staff again sent letters to the City and event operator (see attached 2024 letter). As previously stated by letter to the City, staff requested coordination with the City and operator to reach a mutually satisfactory resolution on these matters and to achieve a satisfactory approach for the conduct of future Pacific Airshows. As part of the Commission's effort to work with the City, staff offers these comments on the NOP and Initial Study (IS).

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low-water mark and a Public Trust easement landward to the ordinary high-water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections. 12-32 (cont.)

After review of the information contained in the NOP, there are several components of the Project that would require Commission authorization. The Commission authorized Lease PRC 6616, a General Lease – Public Agency Use, to the City for the operation and maintenance of an existing municipal pier (Huntington Beach Pier or Pier) and related concessions. That lease was authorized for a term of 25 years, beginning June 21, 2018. Staff is aware that the proposed Project will utilize the Pier. The City's lease acknowledges that the Lease Premises, including the Pier, are subject to the Public Trust and are available to members of the public. If the City proposes to close a portion of the pier within the Lease Premises to the general public, the City must obtain

Commission authorization through the form of an amendment to the existing lease or issuance of a new lease.

Another component of the proposed Project includes the placement of 16 large white buoys along a 12,000-foot line to be located 500 and 1,500 feet offshore, marking the Airshow Performance Area. This area would restrict public access and water-dependent recreation, including boating, during the event; such a restriction is not authorized by the City's lease. The lands waterward of the ordinary high-water mark remain ungranted sovereign lands under the management of the Commission. The placement of the buoys would constitute an additional encroachment on these sovereign lands, and in the absence of Commission authorization would constitute a trespass subject to the Commission's enforcement authority (Pub. Resources Code, §§ 6216.1, 6224.3 *et seq.*, 6301, 6303.1; 2 CCR § 3002). Therefore, the placement of the buoys in the ocean will require Commission authorization.

The proposed Project also includes a helicopter landing/runway display on a temporary helipad to be generally located within an open area directly in front of the Main Hospitality Area during the hours of the airshow. However, based on the current Project information, the proposed runway may encroach waterward of the ordinary high-water mark and within sovereign land subject to the Commission's leasing jurisdiction. In addition, construction activities associated with the proposed runway may temporarily encroach on sovereign land and require Commission authorization. Please provide staff with more detailed Project plans that show the specific proposed location of the landing/runway. 12-32 (cont.)

Therefore, the proposed Project will require an application for an amendment of the existing lease or a new lease. Information on the Commission's leasing process can be found online at www.slc.ca.gov/leases-permits/, the online application can be found at www.oscar.slc.ca.gov/, and any related questions can be directed to Mr. Kelly Connor (contact information below).

In addition, the Commission owns approximately 1,200 acres of sovereign lands in the BCER located within the Project's Temporary Flight Restriction (TFR) Area. The Commission leases these lands to the California Department of Fish and Wildlife (CDFW) for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of the BCER.

Project Description

Pacific Airshow LLC proposes the Pacific Airshow Huntington Beach Project to meet the following objectives and needs:

- Provide a spectacle-scale airshow in Huntington Beach that attracts attendees throughout the Southern California area and beyond.
- Feature civilian and military aircraft flybys and aerial acrobatics, air racing; and helicopter, electric vehicle, drone, and emerging aviation/mobility technology displays.
- Provide visitor-serving entertainment, services, and amenities.
- Provide an event that reduces potential impacts to the surrounding sensitive habitat including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover.

From the Project Description, Commission staff understands that the Project would include the following components that have potential to impact State sovereign land and Public Trust resources:

- Practice flyovers and flight paths: Practice flyover events are proposed to begin the Monday before the start date of the Pacific Airshow event.
- Airshow event activities: Aerial event activities are proposed to take place over a 3 to 5-day period. Event activities include daytime and nighttime events which start at 10:30 AM and nighttime flyovers and/or parachute jumps planned to take place during the evening hours.
- Beach Airstrip: The IS states that a helicopter landing/runway display activity (pg. 2-8) will be held on a temporary airstrip built out on the beach in front of the Main Hospitality Area (pg. 2-11).
- Pyrotechnic nightly shows: A nighttime proposed activity (pg. 2-8) that may be discharged from flyover aircraft, the Huntington Beach Pier, or an ocean barge.
- Event amenities: Event amenities, such as food trucks, wave pool, demonstrations, competitions, drones, and additional events.
- Trash containment and removal: Containment and removal of trash during the event and following the breakdown of the event.
- Single-use plastics: Event vendors providing services and amenities during the event will be strongly encouraged to not use plastic by the Project Sponsor (pg. 2-14).

12-32 (cont.)

Environmental Review

Commission staff requests that the City consider the following comments when preparing the DEIR to ensure that impacts to State sovereign land and Public Trust resources are adequately analyzed.

General Comments

1. Project Description: The Project description (PD) provided in the IS discusses former airshow events as well as future proposed airshow events that would include an expansion of the event from 3 to up to 5 days, with later event stop times (10 PM to 11 PM), and would include many additional proposed activities (e.g., pyrotechnic shows, nighttime music festival). The IS states that the performers and types of aerial activities are likely to change each year (pg. 2-10). The Project description for future airshow events is currently broad and lacks pertinent details for evaluating environmental impacts from all the proposed Project activities. All proposed activities and their environmental impacts must be evaluated in the DEIR. In addition, the DEIR must identify and describe the most impactful combination of activities that could possibly occur (the "worst-case scenario") and carry forward the full environmental impact analysis for that scenario.

   A thorough and complete PD should be included in the DEIR to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The PD should be as precise as possible in describing the details of all allowable activities that originate within or outside the IS's identified Project area (e.g., flight paths from origin airports for practice and event airshow activities, types of aircraft, maximum area of impact, locations of activities within the Project area, etc.), as well as the details of the timing and length of activities. Thorough descriptions will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work and activities that may be performed, and minimize the potential for subsequent environmental analysis to be required. 12-32 (cont.)

2. Project Description – Project Area: The IS states on pg. 2-1 that "The Show Center Area and Airshow Performance Area collectively comprise of the Project Site." However, many Project-related activities (e.g., Project-related flights) also occur within the Project's "temporary flight restriction (TFR) airspace" defined on pg. 2-1 as the "five nautical mile (NM) ring centered on the center of the Airshow's aerobatic box." For purposes of the DEIR, the definition of the Project Site should be expanded to encompass the TFR area. At a minimum, the DEIR should clearly identify a Project Study Area to include the Show Center Area, the Airshow Performance Area, and the 5 nautical mile TFR ring and fully describe and analyze all Project activities and impacts within. Staff encourages the City to work with Pacific Airshow LLC to incorporate Project design changes in the DEIR to avoid sensitive areas like the BCER and that include minimum flight altitude restrictions.

   In addition, the IS does not include the locations of the various event amenities within the Project area. Staff recommends having specific locations for these event amenities described in the DEIR.

3. CEQA Document: If the City is unable to identify a worst-case scenario for Project-level EIR analysis (see comment #1, above), then staff suggests that the City consider using a programmatic environmental impact report (PEIR). A PEIR may be more appropriate than a Project EIR to provide for flexibility in evaluating various activities or components during the projected 10-year timeline for the Pacific Airshow. In addition, a PEIR may allow for future CEQA documents and subsequent environmental impact analyses to evaluate any event activities that are not currently identified.

4. Required Approvals: Staff notes that the IS omits the Commission from the list of public agencies with approval authority over the Project. In the DEIR's Review and Approvals section, please include: 1) the Commission's Responsible agency review of the Final EIR and adoption of an independent Mitigation Monitoring Program, and 2) Approval of a State Lands Lease(s) and/or Lease Amendment. In the DEIR's list of public agencies whose approval is required, please include the Commission as a CEQA Responsible Agency.

5. Helipad/Temporary airstrip: The DEIR should expand upon the IS's description of the helicopter landing/runway display (IS pgs. 2-5, 2-8, 2-10, and 2-11) and clarify that the airstrip may be used for planes as well as helicopters. A recent February 15, 2024, media event promoting the Project featured Airshow operator Kevin Elliott and the City's Mayor each arriving at the beach on small planes. Local media covering the event reported, "For this year's air show, event organizers will construct a temporary runway on the beach where planes will land and take off right in front of spectators."[1] In addition, the IS states on pg. 2-8 that the temporary helipad will be constructed in front of the Main Hospitality Area to provide a landing/runway area for aerial performances. The DEIR should provide a robust description of the construction of this runway or airstrip and include the estimated depth of excavation, as repeated references to this project component in the IS describe construction activities as simply "at or near-grade on the sand" (pg. 3-19). 12-32 (cont.)

Biological Resources

6. Bolsa Chica Ecological Reserve and Special Status Species: BCER is home to over twenty-two special status species and is designated by the U.S. Environmental Protection Agency as a critical flyway for migratory birds. Pg. 2-6 of the IS states that "Preliminary Project objectives include" providing "an event that reduces potential impacts to the surrounding sensitive habitat

[1] Orange County Register, "Huntington Beach air show will land planes on the beach for this year's event" (Feb. 15, 2024)(https://www.ocregister.com/2024/02/15/huntington-beach-air-show-will-land-planes-on-the-beach-for-this-years-event/).

including the Bolsa Chica Ecological Reserve, the Huntington Beach Wetlands, the Magnolia Marsh, and special-status wildlife species such as the federally endangered California least tern and western snowy plover."

However, to accomplish this objective, the DEIR must analyze the Project's potential impacts on these sensitive habitats and formulate enforceable mitigation measures to address the CDFW on-site management team's documented impacts on BCER that have occurred during past Airshows as stated in the August 25, 2023, joint letter from the Commission and CDFW, to the City and airshow operator, Code Four (see attached 2023 letter). While pg. 2-10 of the IS states that "many of the aircraft…seldom fly over land…", this statement conflicts with multiple observations over multiple years, as referenced in the letters sent by Commission on August 25, 2023, and February 20, 2024, to the City and the airshow operator. These letters document incidents during the 2021, 2022, and 2023 airshows of repeated low flyovers by the airshow jets that caused disruptions in the normal behavior patterns of many bird species, including feeding and sheltering, at BCER. These repeated low flyovers harassed the bird populations and caused them to take flight each time the airplanes flew over. This action is considered a "take" and is in violation of California Code of Regulations, title 14, section 251.1 and U.S. Fish and Wildlife regulations 50 CFR 17.3. Additionally, under sections 550, 630 (18), and 632 (121), (122) of title 14, no aircraft operations are permitted in a reserve, and low flyovers are in violation. The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C §§ 703-712) and include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C §§ 1531-1544), and the California Endangered Species Act of 1970 (Fish & G. Code, Ch. 1.5, §§ 2050-2115.5). 12-32 (cont.)

The DEIR should include an evaluation of noise and vibration impacts on fish, birds, and other wildlife from the event's operations activities (practice flyovers and aerial events, pyrotechnic shows, amplified sound, etc.) within the Project radius (5-mile TFR radius centered on the airshow performance area, IS Figure 3), which includes BCER. To support the DEIR's noise and vibrations analyses and environmental impact significance determinations, staff expects the document to also include representative flight paths for practice flyover and aerial event performances.

7. Existing and Regulatory Settings: For all land under the Commission's jurisdiction, the DEIR must disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project Site, including special status wildlife, fish, and plants, and if appropriate, identify

feasible mitigation measures to reduce those impacts. The City should conduct queries of the CDFW's California Natural Diversity Database and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special status plant or wildlife species that may occur in the Project area. The DEIR should also include a discussion of early consultation with the CDFW, USFWS, and National Marine Fisheries Service (NMFS), as applicable, and identify any potentially required permits identified by these agencies.

Additionally, the DEIR's regulatory setting for Biological Resources should include discussion of CDFW regulations prohibiting the use of any "aircraft, hovercraft, or hot air balloon" in Ecological Reserves and other CDFW sites without first obtaining a CDFW Special Use Permit (Cal. Code Regs., tit. 14, § 550 (aa)). The regulatory setting should also include other relevant laws and regulations pertaining to aircraft restrictions in CDFW sites.[2]

8. Drones: The IS states that drone and similar small aircraft technology will be flown as part of the Project, including on pg. 2-8 ("Aircraft static, EV, drone and other urban air mobility (UAM) technology displays and aerial competitions to occur") and pg. 2-9 ("The Applicant would conduct scheduled drone flights throughout the event days for capture of event promotional footage and documentation of event layouts in various areas"). The DEIR should include analysis of potential impacts should drones and similar technology stray into the BCER and include mitigation measures to avoid such impacts. Mitigation could include, but not be limited to, requiring Airshow UAM operators to utilize the FAA's B4UFly app. See *CDFW Wildlife Areas and Ecological Reserves Added to FAA's Drone Mobile App* (https://wildlife.ca.gov/News/Archive/cdfw-wildlife-areas-and-ecological-reserves-added-to-faas-drone-mobile-app#gsc.tab=0). A recent example of drone impacts occurred on May 12, 2021, when an illegally operated drone crashed in the BCER, resulting in approximately 3,000 Elegant Terns leaving their nesting grounds and abandoning an estimated 2,000 eggs,[3] resulting in a massive reproductive loss for the species, which has only four known nesting sites left on earth.[4]

12-32 (cont.)

9. Trash/Trash Removal: The DEIR should include best management practices and mitigation measures to ensure trash, including streamer drops from the Pacific Airshow's opening ceremonies, will be properly contained for the

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[2] Including but not limited to section 3503 of the Fish and Game Code and California Code of Regulations, title 14, sections 251, 251.1.

[3] See CDFW webpg., *Legal and Responsible Drone Operations: Wildlife Disturbance* (https://wildlife.ca.gov/Drones).

[4] National Public Radio, "A Single Drone Has Harmed A Generation Of Wildlife" (June 22, 2021)(https://www.npr.org/2021/06/22/1008986922/a-single-drone-has-harmed-a-generation-of-wildlife).

duration of the event and not overflow to the surrounding beach, water, and greater coastal area, including BCER. Trash can present environmental hazards to species through exposure or ingestion and lead to degradation of habitat. Staff also strongly encourages the Project sponsor to not only "strongly encourage," but require event vendors to avoid single-use plastics (i.e., carry-out bags, cutlery), to the extent feasible, as they are a danger to wildlife (e.g., ingestion, entanglements, etc.).

Air Quality

10. Criteria Pollutants: The IS identified a potentially significant impact to air quality, during the Pacific Airshow's operations phase, from a net increase of criteria pollutants. However, the IS also determined that "There would be no potential for construction or construction-related ground disturbance generating net new emissions or net new increase in short-term construction employment." (p.3-10) and "There would be no potential for construction or construction-related ground disturbance generating a considerable net increase in emissions of ozone precursors (VOC and NOX), PM10, and PM2.5. / No further analysis of this issue in the EIR is required." (p. 3-11) The IS also notes that the Project would include constructing a temporary airstrip on the beach in front of the Main Hospitality Area. Commission staff expects the City to include in the DEIR emissions modeling results for both construction- and operations-related criteria pollutant emissions as well as the associated impact analyses and feasible mitigation measures. 12-32 (cont.)

11. Air Quality Management Plan – existing non-attainment: The IS identified a less than significant impact when evaluating conflicts with or obstructions to the South Coast Air Quality District's (District) Air Quality Management Plan (AQMP). The District provides criteria to evaluate a Project's consistency, which includes "Criterion 1: Will the project result in any of the following: – An increase in the frequency or severity of existing air quality violations…" (p. 3-9). For those criteria pollutants where the region is already in non-attainment, the IS does not adequately discuss why a Project that creates a potentially significant impact by increasing the emission of criteria pollutants (pg. 3-11) does not also create an increase in the frequency and/or severity of the existing non-attainment violations. In addition, the IS artificially and improperly restricts new emissions to those occurring from "on-site" activities ("The competitions and art installations would not result in new emissions from on-site activities. The temporary event structures would also be similar in scale and location to previous Airshows since 2016 (except in 2020) and would not result in new emissions from on-site activities.")(*Id.*) By extending the airshow festival length and adding potential activities, the proposed Project does contemplate an increase in criteria pollutant emissions over any potential

CEQA baseline. The extended airshow festival will result in increased aircraft emissions that should be carried forward and analyzed in the DEIR.

Please also consider including emissions evaluations from idling cars sitting in traffic that could contribute to air quality impacts. The DEIR should thoroughly describe the impact of the Project on air quality and the efforts to avoid, minimize, and mitigate those impacts. Staff recommends the inclusion of traffic mitigations to help reduce further impacts to air quality.

Recreation

12. Public Access: The IS states on pg. 2-10 that "Access to the pier ocean ward [sic] of the seating area shall remain open to the public" and on pg. 2-12, "Public access (for non-ticket holders) to the Pier would remain open during future Airshows. Only a portion of the Pier would be reserved for seated ticketholders and pier ingress and egress would still be provided." Regarding coastline access, the IS states at pg. 3-41 that "vertical and horizontal access to the coastline would be maintained throughout the duration of the event." While the IS evaluates physical deterioration related to beach activity and beach use (pg. 3-50), the Recreation discussion does not include potential impacts to public use of and recreational opportunities on the beach or pier. As the City is not restricted to those questions suggested within the CEQA Guidelines, Appendix G checklist, please include the following impact question as part of the DEIR's recreation analysis: "Would the project interfere with existing public use of and recreational opportunities related to the pier and beach?" As part of the analysis, the document should detail, both in text and in diagrams and/or pictures, how public access to the pier and beach will be maintained. Staff recommends that the City consider incorporating public access monitors as potential mitigation to ensure that Project activities do not inhibit or discourage access to public beaches and the Huntington Beach Pier. 12-32 (cont.)

Hazardous Materials

13. Hazards and Hazardous Materials: Although the IS determined that there were no potentially significant impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (pg. 3-32), the Project has a potential significant impact related to Hazards and Hazardous Materials that should be further evaluated in the DEIR. For example, despite the statement on pg. 2-5 that no oil drilling or oil extraction occurs "within the nearby vicinity," numerous onshore oil wells and related pipelines are nearby, in addition to wells in and adjacent to the BCER. In fact, as the IS notes (pg. 2-5), the 2021 airshow was cut short by an oil spill originating from an offshore oil pipeline. While that particular incident represented an impact on the Airshow from existing activities, the converse is

also reasonably foreseeable, as the Project has the potential to exacerbate existing environmental risks due to the performance of high-risk aerobatic flights over active oil fields, including those in the BCER (*California Bldg. Indus. Ass'n v Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 377, 388-389.). Such overflights have occurred repeatedly in past years' airshows, despite the statement in the IS that airshow aircraft "seldom fly over land" (pg. 2-10). Thus, the reasonably foreseeable potential significant impact of an aircraft accident triggering an oil or hazardous material spill should be analyzed in the DEIR, along with avoidance strategies (for example, by avoiding overflights of BCER) and/or mitigation measures.

The IS states at pg. 2-9 that streamer drops are anticipated as part of the opening ceremony on each day of the Airshow. The DEIR should describe and analyze the potentially significant impact that could occur should streamers land on power lines in the BCER and start a fire. During the 2022 Airshow, streamer drops resulted in streamers landing in the BCER near powerlines, leading the BCER CDFW on-site manager to contact Commission staff with concerns about the risk of fire in the active oil field within the BCER. Please see the previous paragraph as well as comment #1, *Project Description*, for suggestions on Project design changes and requests for mitigation measures. 12-32 (cont.)

Tribal Cultural Resources

14. Consideration of Tribal Cultural Resources: The IS identifies potentially significant impacts to Tribal Cultural Resources (pg. 3-54) but reports that the Project activities would not result in any permanent structures and that no excavations, grading, or trenching would be associated with the construction phase. The inclusion of a beach airstrip in the Project area challenges this conclusion. AB 52 includes both procedural *and* substantive requirements, including the requirement that lead agencies strive to avoid significant adverse changes to tribal cultural resources, regardless of whether consultation is requested or occurs, and incorporate mitigation measures recommended by tribes unless the lead agency determines those suggestions are not feasible. Please note that it is the Commission's broader policy to go beyond the requirements of AB 52 by conducting outreach and consultation with all tribes culturally affiliated with a Project area, as determined by the Native American Heritage Commission, for a proposed Project that may have significant effects on tribal cultural resources. The Commission strongly encourages early, frequent, and meaningful engagement with all culturally affiliated tribes that may be affected by this Project.

Alternatives

15. Alternatives: Staff recommends the inclusion of a no-Project alternative to provide a baseline for establishing environmental conditions in the Project area. Additionally, if the PD is not revised to specify no overflights will occur over the BCER, then staff recommends the City identify and analyze an alternative which excludes flight paths over the BCER, to potentially reduce the level of impacts to State and Federally protected species. In addition to describing mitigation measures that would avoid or reduce the potentially significant impacts of the Project, the City should identify and analyze a range of reasonable alternatives to the proposed Project that would attain most of the Project objectives while avoiding or reducing one or more of the potentially significant impacts (see State CEQA Guidelines, § 15126.6).

Environmental Justice

16. Environmental Justice: Environmental Justice is defined by California law as "the fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Gov. Code § 65040.12) This definition is consistent with the Public Trust Doctrine's principle that management of trust lands is for the benefit of all people. The Commission adopted an updated Environmental Justice Policy and Implementation Blueprint in December 2018 to ensure that environmental justice is an essential consideration in the agency's processes, decisions, and programs. The twelve goals outlined in the Policy reflect an urgent need to address the inequities of the past, so they do not continue. Through its policy, the Commission reaffirms its commitment to an informed and open process in which all people are treated equitably and with dignity, and in which its decisions are tempered by environmental justice considerations. 12-32 (cont.)

    Although not legally required in a CEQA document, Commission staff suggests that the City include a section describing the environmental justice community outreach and engagement undertaken in developing the DEIR and the results of such outreach. The California Office of Environmental Health Hazard Assessment developed the CalEnviroScreen mapping tool to assist agencies with locating census tracts near proposed Projects and identifying the environmental burdens, should there be any, that disproportionately impact those communities. Environmental justice communities often lack access to the decision-making process and experience barriers to becoming involved in that process. It is crucial that these communities are consulted as early as possible in the Project planning process. Commission staff strongly recommends using the CalEnviroScreen

tool and then, as applicable, reaching out through local community-based organizations, such as Communities for a Better Environment and Orange County Environmental Justice. Engaging in early outreach will facilitate more equitable access for all community members. In this manner, the CEQA public comment process can improve and provide an opportunity for more members of the public to provide input related to environmental justice. Commission staff also recommends incorporating or addressing opportunities for community engagement in mitigation measures. Furthermore, a key goal in the Commission's Environmental Justice Policy and Implementation Blueprint is increasing and supporting equitable public access, as discussed in comment #12, above. Commission staff recommends the City consider environmental justice communities in their analysis. Commission staff will review the environmental justice outreach and associated results as part of any future Commission action.

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, Commission staff requests consultation on this Project and to be kept advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the DEIR is being prepared. 12-32 (cont.)

Please refer questions concerning environmental review to Robin Tuohy, Environmental Scientist, at Robin.Tuohy@slc.ca.gov and Christine Day, Environmental Scientist, at Christine.Day@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Kelly Connor, Public Land Management Specialist III, at Kelly.Connor@slc.ca.gov. For questions related to the BCER, please contact Wendy Hall, Environmental Program Manager, at Wendy.Hall@slc.ca.gov.

Sincerely,

Nicole Dobroski
Chief Division of Environmental Science, Planning, and Management

Attachments:

1) February 24, 2024, letter from Commission staff to City of Huntington Beach and Code Four
2) August 25, 2023, letter from Commission staff to City of Huntington Beach

cc: Office of Planning and Research
R. Tuohy, Commission

C. Day, Commission
K. Connor, Commission
W. Hall, Commission
L. Calvo, Commission
Y. Ramirez, Commission

12-32
(cont.)

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***Contact Phone:* 916.574.1900**

February 20, 2024

File ref: Lease 6616

Sent via postal and E-Mail (Eric.Parra@surfcity-hb.org)

Mr. Eric G. Parra
Interim City Manager
City of Huntington Beach
2000 Main Street
Huntington Beach, California 92648

Mr. Kevin Elliott
Chief Executive Officer
Code Four
5252 Bolsa Ave
Huntington Beach, CA 92649

12-33

SUBJECT: Required Application for Commission Authorization for the Operation and Maintenance of Huntington Beach Pier and Pacific Ocean AND Conditions to Protect the Bolsa Chica Ecological Reserve

Dear Mr. Parra and Mr. Elliott:

In 2023, the State Lands Commission (Commission) sent two letters to the city of Huntington Beach (City) and the event operator, Code Four prior to last year's Huntington Beach Pacific Airshow expressing concerns which were subsequently not addressed by either the City or Code Four. The letters are attached. These issues remain unresolved, and the Commission requests coordination with the City and Code Four to reach a mutually satisfactory resolution on these matters and to achieve a satisfactory approach for the conduct of future Pacific Airshows. Commission staff is aware of the Notice of Preparation/Initial Study the City has issued for an Environmental Impact Report

for the Airshow, and staff will send a separate CEQA comment letter as part of the CEQA process.

Required Application for Commission Authorization for the Operation and Maintenance of Huntington Beach Pier and Sovereign Land in the Pacific Ocean:

In 2023, the City permitted Code Four for an event known as the Huntington Beach Pacific Airshow that occurred in and around the Pacific Ocean, near and on the Huntington Beach Pier. This is to advise you that the activity constituted an unauthorized use of State land, under the jurisdiction of the California State Lands Commission (Commission), well outside of the City's current lease rights.

As a reminder, the Commission authorized Lease PRC 6616, a General Lease – Public Agency Use, to the City for the operation and maintenance of an existing public municipal pier (Huntington Beach Pier or Pier) and related concessions. That lease was authorized for a term of 25 years, beginning June 21, 2018.

Based on the information available, the 2023 event occurred for three days, from September 29th through October 1st, with airshow flights between 10:30 am to 4:30 pm, and a festival near the Huntington Beach Pier on all three days until 8:00 pm. Additionally, staff understands that the public Pier was closed to the general public on all three days of the event and that the event operator allowed access to the Pier through the purchase of a ticket sold by a private vendor. While staff were informed by the City that public access to the pier would still be available during the event, photographs of the pier during the event do not indicate that public access was provided. In addition, the event required the temporary placement of 16 large white buoys along a 12,000-foot line 500 feet offshore, as well as other buoys marking a "sterile aerobatic box" area, within the Commission's jurisdiction. This degree of restriction on public access and recreation along the beach and in the ocean, where boating was also restricted during the event, is not authorized by the City's lease. The lands waterward of the ordinary high-water mark remain ungranted sovereign lands under the management of the Commission. 12-33 (cont.)

As a reminder, the City's lease acknowledges that the Premises are subject to the Public Trust and are available to members of the public. Per Section 2, Paragraph 3 of the lease:

> "Lessee acknowledges that the Lease Premises are subject to the Public Trust and are presently available to members of the public for recreation,

waterborne commerce, navigation, fisheries, open space, and any other recognized Public Trust uses. Lessee also agrees that any proposed construction activities and subsequent use of the Lease Premises shall not unreasonably interfere with or limit Public Trust rights and shall do so only to the extent necessary to protect public health and safety during construction activities authorized by Lessor, or when imminent threats to public health and safety are present."

The closure of the Pier to the general public requires Commission authorization. An application for Commission authorization is urgently required to avoid continued violations of the lease and unauthorized use for future proposed events.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. Please note that applications can take a minimum of six months to process and schedule for consideration. We encourage the City to complete and submit an application as soon as possible. The Online Application will require the City to provide the following (at a minimum):

12-33 (cont.)

- Copies of all currently approved or in process permits for the event with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A description of the closure, impacts, and timeline of the event.
- An Approximate Expense Deposit for application review and processing.
- Photos or diagrams showing where the closure of the pier begins.

Required Application for Lease from Event Operator, Code Four:

Airshow activities described above, including those occurring on and over the water (e.g., placement of buoys, etc.) and on the portions of the Pier that stand on land waterward of the ordinary high-water mark, also require Code Four to obtain Commission authorization.

The lease application is available online through our website at https://www.slc.ca.gov/leases-permits/. A video is available to assist you in completing the application process. Please note that applications can take a minimum of six months to process and schedule for consideration. We encourage you to complete and submit an application as soon as possible. The Online Application will require you to provide the following (as a minimum):

- Copies of all currently approved or in process permits with the City of Huntington Beach, United States Coast Guard, California Coastal Commission, and California Department of Fish and Wildlife.
- A drawing of the existing activity area, including all dimensions and proposed improvements.
- Specific location information on placement of marker buoys.
- Specific location information on placement of temporary airstrips/helipads and any other potential encroachments and activities waterward of, or adjacent to the ordinary high-water mark.
- An Approximate Expense Deposit for application review and processing.

If you fail to apply to the Commission for a lease, as codified in California Public Resources Code sections 6224.3 and following, trespassing structures (including but not limited to buoys) may be subject to administrative enforcement. After an administrative enforcement action, the Commission may impose penalties of up to $1,000 per day until a lease is obtained or the structures are removed. 12-33 (cont.)

Conditions to Protect the Bolsa Chica Ecological Reserve:

The Commission owns approximately 1200 acres of sovereign lands in the Bolsa Chica Ecological Reserve (BCER). The Commission leases these lands to the California Department of Fish and Wildlife (CDFW) for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of BCER.

Portions of the BCER contain active oil operations, including operating wells and pipelines maintained by California Resources Corporation. An aircraft accident in this area could create legal liability for the parties responsible, in addition to potentially causing ecological and human health and safety damage.

CDFW is responsible for the daily on-site management of the BCER, which provides habitat for a rich diversity of fish, wildlife, and plant species, including many listed and special status species. The department is also responsible for regulatory enforcement and management of related recreational, commercial, scientific, and educational uses.

During the 2023 airshow, repeated low flyovers by the airshow jets caused disruptions in the normal behavior patterns of many bird species, including

feeding and sheltering at BCER. These repeated low flyovers harassed the bird populations and caused them to take flight each time the airplanes flew over. This action is considered a "take" and is in violation of California Code of Regulations, title 14, section 251.1. Additionally, under sections 550, 630 (18), and 632 (121), (122) of title 14, no aircraft operations are permitted in a reserve, and low flyovers are in violation. The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C §§ 703-712). These also include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C §§ 1531-1544), and the California Endangered Species Act of 1970 (Fish & G. Code, Ch. 1.5, §§ 2050-2115.5). A few that depend heavily on the BCER include the Western snowy plover, Light-footed Ridgway's rail, Coastal California gnatcatcher, and the Belding's savannah sparrow.

We request your cooperation and compliance in these matters and urge the City to contact the Commission to: 12-33 (cont.)

1) As described above, submit a lease application immediately or contact our office for a meeting to discuss. If you have any questions, please contact either Ken Foster at (916) 574-2555 or by email at kenneth.foster@slc.ca.gov or Kelly Connor at (916) 574-0343 or by email at kelly.connor@slc.ca.gov.
2) Impose conditions on approvals for the 2024 Airshow and future events which disallow any flights directly over the BCER. If you have any questions, please contact Wendy Hall at (916)-574-0994 or wendy.hall@slc.ca.gov.

Sincerely,

Brian Bugsch
Chief, Land Management Division

cc: see next page

cc: Michael Gates, City Attorney, City of Huntington Beach
Seth Blackmon, CLSC Legal Division
Warren Crunk, CSLC Legal Division
Lucinda Calvo, CSLC Legal Division
Ken Foster, CSLC Land Management Division
Kelly Connor, CSLC Land Management Division
Wendy Hall, CSLC Executive Division

Attachments

12-33
(cont.)

DocuSign Envelope ID: 546BD703-6F32-49D5-8A10-5D773405B818

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
916.574.1800
TTY CA Relay Service: **711** *or Phone* **800.735.2922**
from Voice Phone **800.735.2929**
or for Spanish **800.855.3000**

***Contact Phone:* 916.574.1900**

August 25, 2023

Sent via postal and E-mail (Michael.Gates@surfcity-hb.org)

Michael E. Gates
City Attorney
City of Huntington Beach
2000 Main Street
Huntington Beach, California

12-34

Subject: Huntington Beach Airshow – conditions to protect the Bolsa Chica Ecological Reserve

Dear Mr. Gates,

The California State Lands Commission (Commission) and California Department of Fish and Wildlife (CDFW) are jointly submitting this letter to address several concerns regarding the upcoming Huntington Beach Pacific Airshow scheduled for September 29th through October 1st, 2023.

As background, the Commission manages four million acres of sovereign tide and submerged lands, the beds of natural, navigable waterways including lakes and rivers, and school lands. The mission of the Commission is to provide the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care through preservation, restoration, enhancement, responsible economic development, and the promotion of public access. This stewardship of sovereign lands and natural resources is guided by the common law Public Trust Doctrine, the California Constitution, various laws, and regulations specific to the Commission, and statutory trust grants.

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The Commission owns approximately 1200 acres of sovereign lands in the Bolsa Chica Ecological Reserve (BCER). The Commission leases these lands to the CDFW for on-site management. Additionally, the Commission, along with five other state and federal agencies informally referred to as the Bolsa Chica Steering Committee, provides overall management oversight of BCER.

Portions of the BCER contain active oil operations, including operating wells and pipelines maintained by California Resources Corporation. An aircraft accident in this area could create legal liability for the parties responsible, in addition to potentially causing ecological and human health and safety damage.

CDFW manages California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFW is responsible for the management of over 1.1 million acres of fish and wildlife habitat spanning over 700 properties statewide. These properties provide habitat for a rich diversity of fish, wildlife, and plant species and comprise habitats from every major ecosystem in the state. CDFW is responsible for regulatory enforcement and management of related recreational, commercial, scientific, and educational uses.

12-34 (cont.)

During the 2021 and 2022 airshow, several incidents occurred that caused disruptions in the normal behavior patterns of many bird species, including feeding and sheltering at Bolsa Chica Ecological Reserve. Disturbances included dropping streamers in the BCER, causing potential harm to wildlife and fire risk, and repeated low flyovers, which harassed the bird populations and caused them to take flight each time the airplanes flew over. This latter action is considered a "take" and is in violation of CCR T-14 251.1. Additionally, under Section 630 (17) of Title 14 "no aircraft operations are permitted in a reserve, and low flyovers are in violation". The sound pollution and overhead flights pose a threat to birds and other wildlife. The BCER is a critical stopover along the Pacific Flyway for hundreds of migratory bird species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C 703-712). These also include threatened and endangered species which are protected under the Federal Endangered Species Act of 1973 (16 U.S.C 1531-1544), and the California Endangered Species Act of 1970 (FGC,1.5, 2050-2115.5). A few that depend heavily on the BCER include the Western snowy plover, Light-footed Ridgway's rail, Coastal California gnatcatcher, and the Belding's savannah sparrow.

In order to avoid a reoccurrence of these concerns this year for the 2023 airshow, we request compliance with the following conditions:

1. No flyovers will occur over BCER.
2. No streamers or any other debris will be dropped over the BCER.

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We would be happy to meet with you to discuss these concerns and reach a mutual concurrence on a protocol for the event that accommodates the airshow, while protecting the natural resources of BCER.

Please confirm receipt of this letter.

Sincerely,

DocuSigned by:
Wendy Hall
C23D6B9797F1445...

Wendy Hall
Environmental Program Manager
Special Projects Liaison
California State Lands Commission

DocuSigned by:
Tim Dillingham
18197A48BF3B4B6...

Tim Dillingham
Environmental Program Manager
Lands and Wildlife, South Coast Region
California Department of Fish & Wildlife

12-34
(cont.)

cc:

Michael E. Gates, Attorney, City of Huntington Beach
Al Zelinka, Manager, City of Huntington Beach
Ashley Wysocki, Deputy Director, Community & Library Services, City of Huntington Beach
Kevin Elliott, CEO, Code Four, Airshow, LLC
Gregory McDonald, Long Beach Front Line Manager, Federal Aviation Administration
Lucinda Calvo, Attorney IV, CA State Lands Commission

EXHIBIT 6

U.S. Department
of Transportation

**Federal Aviation
Administration**

ADVISORY CIRCULAR

Subject: VISUAL FLIGHT RULES (VFR) FLIGHT NEAR NOISE-SENSITIVE AREAS

Date: September 17, 2004 **AC No: 91-36D**

Initiated by: ATO-R

1. PURPOSE. This Advisory Circular (AC) encourages pilots making VFR flights near noise-sensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths that will reduce aircraft noise in such areas.

2. EFFECTIVE DATE. This advisory circular is effective on September 17, 2004.

3. CANCELLATION. Advisory Circular 91-36C, Visual Flight Rules (VFR) Flight Near Noise Sensitive Areas, dated October 19, 1984, is cancelled.

4. AUTHORITY. The FAA has authority to formulate policy regarding use of the navigable airspace (Title 49 United States Code, Section 40103).

5. EXPLANATION OF CHANGES. This AC has been updated to include a definition of "noise-sensitive" area and add references to Public Law 100-91; the FAA Noise Policy for Management of Airspace Over Federally Managed Lands, dated November 1996; and the National Parks Air Tour Management Act of 2000, with other minor wording changes.

6. BACKGROUND.

a. Excessive aircraft noise can result in annoyance, inconvenience, or interference with the uses and enjoyment of property, and can adversely affect wildlife. It is particularly undesirable in areas where it interferes with normal activities associated with the area's use, including residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute. Moreover, the FAA recognizes that there are locations in National Parks and other federally managed areas that have unique noise-sensitive values. The Noise Policy for Management of Airspace Over Federally Managed Areas, issued November 8, 1996, states that it is the policy of the FAA in its management of the navigable airspace over these locations to exercise leadership in achieving an appropriate balance between efficiency, technological practicability, and environmental concerns, while maintaining the highest level of safety.

b. The Federal Aviation Administration (FAA) receives complaints concerning low flying aircraft over noise sensitive areas such as National Parks, National Wildlife Refuges, Waterfowl Production Areas and Wilderness Areas. Congress addressed aircraft flights over Grand Canyon National Park in Public Law 100-91 and commercial air tour operations over other units of the National Park System (and tribal lands within or abutting such units) in the National Parks Air Tour Management Act of 2000.

c. Increased emphasis on improving the quality of the environment requires a continuing effort to provide relief and protection from low flying aircraft noise.

d. Potential noise impacts to noise-sensitive areas from low altitude aircraft flights can also be addressed

through application of the voluntary practices set forth in this AC. Adherence to these practices is a practical indication of pilot concern for the environment, which will build support for aviation and alleviate the need for any additional statutory or regulatory actions.

7. DEFINITION. For the purposes of this AC, an area is "noise-sensitive" if noise interferes with normal activities associated with the area's use. Examples of noise-sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute.

8. VOLUNTARY PRACTICES.

a. Avoidance of noise-sensitive areas, if practical, is preferable to overflight at relatively low altitudes.

b. Pilots operating noise producing aircraft (fixed-wing, rotary-wing and hot air balloons) over noise-sensitive areas should make every effort to fly not less than 2,000 feet above ground level (AGL), weather permitting. For the purpose of this AC, the ground level of noise-sensitive areas is defined to include the highest terrain within 2,000 feet AGL laterally of the route of flight, or the uppermost rim of a canyon or valley. The intent of the 2,000 feet AGL recommendation is to reduce potential interference with wildlife and complaints of noise disturbances caused by low flying aircraft over noise-sensitive areas. 12-35 (cont.)

c. Departure from or arrival to an airport, climb after take-off, and descent for landing should be made so as to avoid prolonged flight at low altitudes near noise-sensitive areas.

d. This advisory does not apply where it would conflict with Federal Aviation Regulations, air traffic control clearances or instructions, or where an altitude of less than 2,000 feet AGL is considered necessary by a pilot to operate safely.

9. COOPERATIVE ACTIONS. Aircraft operators, aviation associations, airport managers, and others are asked to assist in voluntary compliance with this AC by publicizing it and distributing information regarding known noise-sensitive areas.

Signed

_____

Sabra W. Kaulia
Director of System Operations & Safety

Comment Letter 12: Carstens, Black & Minteer LLP

Response to Comment 12-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-2

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-3

As stated in Section 3.2, *Biological* Resources, page 3.2-1, of the Draft EIR, and as shown on Figure 3.2-1A through Figure 3.2-1J, "For purposes of this biological resources technical analysis, a broader biological study area (BSA) was defined, which includes the Show Center Area (where primary on-the-ground events and activities of the Airshow take place) but also extends beyond this area to reflect the potential impacts associated with civilian and military aircraft flybys and aerial acrobatics." Because the expected flight paths are not planned to cross over the BCER, the majority of the BCER was not included in the study area. However, the biological monitoring efforts that occurred in 2023 did include the BCER and future monitoring efforts would also include the BCER. Refer also to Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER. In summary, while the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 12-4

Airshow performer arrivals are contingent upon their schedule and proximity of previous Airshow sites they have attended. All Airshow performers do not arrive to the Airshow Performance Area before the Monday of the Airshow week. These arrivals often include an overflight and aerial survey of the Airshow Performance Area on the inbound to landing on arrival day. If Airshow performers arrive on Monday, they would typically also conduct flight familiarization and flight practice flyovers for up to one hour later in the week prior to the Airshow. Refer also to Master Response D, which discusses the biological monitoring efforts that will be conducted for future Airshows, which includes monitoring during all of the pre-Airshow activities that lead up to the Airshow itself.

Response to Comment 12-5

Refer to Master Response C for a discussion of the nesting season relative to the Airshow.

Response to Comment 12-6

Refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 12-7

The Draft EIR does not state that "the Project would not include BCER overflights."

Instead, as stated in Chapter 2, *Project Description*, pages 2-10 and 2-11 of the Draft EIR,

> *The Applicant will provide mandatory in-person or virtual daily formal briefings each day of the Airshow to all pilots about the location, nature, and sensitivity of the BCER and will request avoidance of overflights over this area. In addition, the Applicant will advise Southern California Terminal Radar Approach Control Facilities (TRACON) and the Joint Forces Training Base Los Alamitos Airfield Tower on the location, nature, and sensitivity of the BCER and will request avoidance of overflights in this area. The Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that overflights occur at 1,000 feet above ground level or above.*

As required by CEQA, the Draft EIR disclosed and analyzed potential direct, indirect, and cumulative impacts associated with the Proposed Project, providing mitigation where necessary and feasible. Refer also to Master Response B regarding documented concerns raised by state and federal agencies regarding the Airshow's impact to sensitive species and habitat.

Response to Comment 12-8

Refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 12-9

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-10

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-11

Refer to Response to Comment 2-19 for a discussion of the purpose of the use of streamers and the single occurrence of a streamer that drifted into the BCER. Refer also to Response to Comment 2-11 for a discussion of the actual flight paths and elevations of previous Airshows.

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 12-12

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-13

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 12-14

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 12-15

Refer to Response to Comment 12-3 for a discussion of the extent of the biological resource study area, as well as how it was determined, and where future biological monitoring activities will occur, which will include the BCER.

Response to Comment 12-16

As noted in Chapter 2, *Project Description*, on pages 2-6 and 2-7, of the Draft EIR: "Future Airshows are anticipated to be held annually for three (3) days to up to five (5) days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The Draft EIR acknowledges flight rehearsals leading up to the Airshow.

Response to Comment 12-17

The commentor mentions the Federal Aviation Administration's Advisory Circular 91-36D (September 17, 2004), indicating the FAA "recommends" (emphasis added) that aircraft avoid noise-sensitive areas, including areas with "wilderness characteristics." The Advisory Circular is a guidance document, which specifically states, in Section 8d, "This advisory does not apply where it would conflict with Federal Aviation Regulations, air traffic control clearances or instructions, or where an altitude of less than 2,000 feet AGL is considered necessary by a pilot to operate safely." As reflect in Master Response A, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as

directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams..

Response to Comment 12-18

Refer to Master Response D for a discussion of the biological monitoring efforts, beyond those already conducted for the 2023 Airshow, that will be conducted for future Airshows to further ensure that impacts to sensitive species would be avoided or reduced. As reflected in Master Response D, monitoring will be included one day before any pre-Airshow-related activities, as well as during all pre-Airshow and Airshow days.

Response to Comment 12-19

As stated on page 3-2, *Environmental Setting, Impacts, and Mitigation Measures*, of the Draft EIR:

> *Pursuant to CEQA Guidelines Section 15125(a)(1), an EIR must include a description of the existing physical environmental conditions in the vicinity of the proposed project from both a local and regional perspective. This description provides the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the Project was published on February 1, 2024, so February 1, 2024, will serve as the baseline for the environmental impact analysis contained in this Draft EIR.*

The determination of the baseline for this environmental analysis is consistent with the requirements of CEQA.

Response to Comment 12-20

Refer to Response to Comment 2-11.

Response to Comment 12-21

Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 12-22

Refer also to Response to Comment 2-11 for a discussion of existing flights over the BCER from CDFW and oil operations.

Response to Comment 12-23

Refer to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 12-24

The Project's MMRP includes all mitigation measures identified in the Draft EIR and also voluntarily includes Project Description features (e.g., biological monitoring) to ensure enforceability. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

At John Wayne Airport, aircraft activity is prohibited between 11 PM and 7 AM (8 AM on Sundays). In terms of the historic hours of operation of the Airshow, Chapter 2, *Project Description*, page 2-7, of the Draft EIR, states that: "For all Airshow event days, which are open to the public, the Airshow admission, venue, and festival areas are open from 9:00 AM to 6:00 PM with civilian and military aircraft flybys and aerial acrobatics performing from approximately 10:00 AM to 5:00 PM." As noted on page of Chapter 2 2, *Project Description*, of the Draft EIR, "New Airshow activities for future Airshows could also extend as late as 11:00 PM." Therefore, the nighttime prohibition (of 11 PM) of the Airshow is consistent with the operating procedures at John Wayne Airport.

Response to Comment 12-25

Refer to Response to Comment 9-10.

Response to Comment 12-26

The public review period for the Notice of Preparation (NOP) started on Thursday, February 1, 2024, and ended on Monday, March 4, 2024. The public review period for the Draft EIR started on February 20, 2025, and ended on April 7, 2025. This letter, prepared by Carstens, Black & Minteer LLP, dated June 29, 2023, was prepared prior to the public review period for the NOP and Draft EIR. This letter is noted and included in the Project record. No further response is required.

Response to Comment 12-27

This letter, prepared by the California State Lands Commission, dated August 25, 2023, was prepared prior to the public review period for the NOP and Draft EIR. This letter is noted and included in the Project record. No further response is required.

Response to Comment 12-28

This letter, prepared by the California State Lands Commission, dated February 20, 2024, largely discusses the required application for State Lands Commission authorization for the operation and maintenance of the City of Huntington Beach Pier and Pacific Ocean. No further response is required for the discussion regarding the authorization of the Pier and Pacific Ocean because this discussion neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Refer to Master Response C.

Response to Comment 12-29

This letter, prepared by the California State Lands Commission, dated August 10, 2023, discusses the required application for State Lands Commission authorization for the operation and maintenance of the City of Huntington Beach Pier. No further response is required for the discussion regarding the authorization of the Pier because this discussion neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-30

This letter, prepared by the California State Lands Commission, dated August 10, 2023, discusses the required application for State Lands Commission authorization for the operation and maintenance of the City of Huntington Beach Pier. No further response is required for the discussion regarding the authorization of the Pier because this discussion neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-31

This letter, prepared by the California Coastal Commission (CCC), dated February 21, 2024, discusses the requirement of the Airshow to obtain a coastal development permit (CDP). No further response is required for the discussion of the CDP because this discussion neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 12-32

This letter, prepared by the State Lands Commission, dated March 4, 2024, is attached to Comment Letter 2. As such, please see Response to Comment 2-23 through Response to Comment 2-45.

In State Lands Commission, dated March 4, 2024, the commentor notes that "The California State Lands Commission staff has reviewed the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Pacific Airshow Huntington Beach (Project or Airshow), which is being prepared by the City of Huntington Beach (City)." Accordingly, this Responses to Comments document responds to those Notice of Preparation comments that were specifically raised in the Commission's Draft EIR comment letter. No further response is required.

Response to Comment 12-33

Refer to Response to Comment 12-28.

Response to Comment 12-34

Refer to Response to Comment 12-27.

Response to Comment 12-35

This letter, prepared by the U.S. Department of Transportation (US DOT), FAA, dated September 17, 2004, was prepared to encourage pilots making visual flight rules (VFR) flights near noise-

sensitive areas to fly at altitudes higher than the minimum permitting by regulation and on flight paths that will reduce aircraft noise in such areas.

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Comment Letter 13

April 5, 2025

Via email: connor-hyland@surfcity-hb.org

Mr. Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach, Office of the City Attorney
2000 Main Street
Huntington Beach, CA 92648

Subject: Comments on the Draft Environmental Impact Report regarding the Pacific Airshow

Dear Mr. Hyland,

I am a resident of Seal Beach who resides in the neighborhood of College Park East. Our neighborhood is very supportive of the Joint Forces Training Base (JFTB), the military, and many of our residents have enjoyed watching aircraft departing the base during the airshows over the years. Maps in the Initial Study (Figure 4b and Appendix B) show our tract's proximity to the runways of the JFTB, located immediately southwest of the JFTB's long runway and immediately west of the Old Ranch Country Club golf course. 13-1

Established flight paths leaving the JFTB travel out over the Old Ranch Country Club golf course and turn 180 to pass over the Seal Beach Naval Weapons Station, or Seal Beach Boulevard, toward the ocean. However, during the 2023 Pacific Air Show some of the jets made a very sharp turn to the east and traveled very low over College Park East. I have been told that these jets can be as loud as 140 dBA on departure from the base, so this may well have exposed our residents to noise levels of more than 100 dBA. Such noise levels can be harmful to sensitive receptors such as children, sensitive individuals, and pets (requiring residents to sedate their pets days in a row). 13-2

Section 2 of the Draft Environmental Impact Report contains Section 2.6.4, titled "Airport Origin, Airshow Flight Paths and Airshow Performance Duration." In this section, it lists the participating aircraft and states, "many of the aircraft, particularly the larger ones, seldom fly over land and instead hold out over the water and only make a few passes in front of the Show Center Area before returning to their origin airports." A statement later in that section states that the airshow flight paths "are subject to change each year for the Airshow." Initial Study Section 5.4.2: Analysis of Project Effects: Noise states that "The predominant source of 13-3

increased noise for this event would be associated with fighter jets executing high velocity maneuvers. Examples of which would be the F/A18 Super hornet, F-16 fighting falcon, and F-35 Lightning." While I support efforts to avoid flights over the Seal Beach Naval Weapons Station's National Wildlife Refuge and the Bolsa Chica Ecological Reserve, I have great concerns about the possibility of very loud, fast, low aircraft being diverted once again over the College Park East neighborhood. Please follow the established flight routes on departure from the JFTB to limit excessive noise exposure both to the ecological reserves and to the neighborhood of College Park East.

13-3 (cont.)

I believe that a 3-day Alternative for the Airshow is a better option, with shows on Saturday and Sunday and a practice day on Friday. With the proposed expansion to a 5-day show, there would be greater impacts during weekdays. These may include impacts on work and school traffic, as well as noise impacts for Los Alamitos Unified School District schools, for those who work from home, and during nighttime hours if any of the music flyovers originate from the JFTB. A 3-day alternative would provide fun and profit for the event organizer and the City of Huntington Beach while limiting impacts on the environment and residents of Seal Beach. Please consider suggested events such as music concerts, sandcastle building, skateboard/BMX and camping as activities at a separate event, which could also provide recreation to the public and economic benefits to the event organizer and the City of Huntington Beach.

13-4

Thank you for your consideration of my comments.

Sincerely,

Schelly Sustarsic
4288 Candleberry Ave
Seal Beach, CA 90740

Comment Letter 13: Schelly Sustarsic

Response to Comment 13-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 13-2

The City has received several comments on the health effects of noise. Multiple studies on the impacts of aircraft noise on public health have been undertaken and more studies are currently underway[10], [11], [12] Research suggests that noise can have varying levels of effects on people. From these studies, criteria have been established to protect public health and safety and prevent disruption of certain human activities. These criteria are based on the effects of noise on people, sleep interference, and physiological responses. While aircraft noise would generate a substantial temporary increase in ambient noise levels and thus result in a significant impact, it would not have adverse effects on biological resources or human health.

At all times, the FAA, the Airshow, and pilots are committed to the safe operation of aircraft. While the pilot has ultimate control of the aircraft while in flight, the FAA has the primary role of ensuring safe and efficient use of the National Airspace System (NAS). Aircraft will adhered to predetermined flight path to avoid residential areas as much as possible. This includes having aircraft remain over water whenever operationally feasible to reduce noise exposure to area further inland from the coast. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 13-3

For a discussion on nesting season, refer to Master Response C. For a discussion on biological monitoring, refer to Master Response D. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 13-4

Refer to Response to Comment 5-4 and Response to Comment 9-16.

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10 *The State of the Art of Predicting Noise-Induced Sleep Disturbance in Field Settings*, Fidell S., Tabachnick, B., Pearsons, K., Noise and Health, Volume 12, Issue 47, p. 77-87, 2010.

11 *ACRP Synthesis 9, Effects of Aircraft Noise: Research Updated on Selected Topics*, Transportation Research Board of the National Academies, Airport Cooperative Research Program, 2008.

12 *Request for Comments; Clearance of a New Approval of Information Collection: National Sleep Study*, U.S. Department of Transportation, Federal Aviation Administration, Agency Information Collection Activities, 84 Fed. Reg. 65453, November 27, 2019.

As discussed in Chapter 4, *Alternatives*, the 2023 Airshow Alternative would not include a music festival, helicopter and aircraft runway/display, skateboard/BMX competition, pyrotechnic shows, sandcastle building competition, and beach camping, among other activities/features. The Airshow would continue to be held annually Friday through Sunday during the fall season with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. The 2023 Airshow Alternative would result in the fewest environmental impacts as compared to the Project and is considered the Environmentally Superior Alternative. However, this alternative would not meet all of the Project Objectives. Furthermore, the 2023 Airshow Alternative would reduce the opportunity to gather since fewer events would be held over fewer days. With fewer activities, it is anticipated that the positive economic impact, the potential tax revenues, and the number of employees needed to staff the Airshow would each potentially be reduced. In addition, without offering the events promoting the beach community, including beach camping and sandcastle building among others, there would be a reduced positive impact to the promotion of the Huntington Beach Pier and beaches.

Comment Letter 14

From: Susan Perrell <susan@outdoorsynergy.net>
Sent: Saturday, March 29, 2025 4:23 PM
To: Hyland, Connor <connor.hyland@surfcity-hb.org>
Subject: Comments on the Draft Environmental Impact Report (DEIR) for the Pacific Airshow Huntington Beach Project (SCH#2024020006)

Mr. Connor Hyland

Deputy City Attorney

City of Huntington Beach

2000 Main Street, 4th Floor

Huntington Beach, CA 92648

Dear Mr. Hyland:

Thank you for the opportunity to comment on the DEIR for the Pacific Airshow Huntington Beach Project (Project). I want to express my enthusiasm and support for the Huntington Beach Airshow that my family, friends, neighbors, and I have enjoyed over the years. However, certain aspects of the proposed Project and the Project DEIR concern me. My comments below are intended to help clarify the scope of the proposed Project, fill in some critical gaps in the Project DEIR, ensure that the Project Alternatives are properly considered, and ensure that potentially significant environmental impacts are adequately assessed and avoided or mitigated to the extent feasible. I believe that a more complete and accurate EIR can be produced relatively quickly and easily and will help to drive support for the Air Show. 14-1

- The DEIR rejected "Project Alternative 2" for "not meeting the Project Objectives in their entirety". It is not clear that CEQA requires a viable and feasible project alternative to meet *"Project Objectives in their entirety"*. CEQA guidance and case studies seems to indicate that a viable alternative needs only to " feasibly attain most of the basic project objectives". The reasoning in the DEIR for eliminating Project Alternative2 does not seem appropriate or consistent with CEQA. Project Alternative 2 is a highly feasible project alternative that clearly meets most of the 14-2

project objectives, while also avoiding and mitigating impacts, and it has proven successful in all recent Airshows. The EIR should review Alternative 2 in more detail. If Alternative 2 is to be eliminated, then the EIR should provide specific reasoning, including CEQA Code citations, CEQA Guideline citations, and relevant CEQA case studies that could justify its elimination. 14-2 (cont.)

- The EIR should assess the potential for long-term hearing loss to children and adults attending the airshow for the three-day program and for the proposed 5-day program. It is well known that even short-term exposure to noise over 90dB can cause permanent hearing loss. Many flights at the airshow *exceed* 90dB at receptor locations including the pier, beach, PCH, Pacific City, and the blocks surrounding the Airshow with densely populated visitors and residents. Hearing loss in children and adults is already a growing problem that has been shown to reduce learning success, mental health, and lifetime earnings. The Project should propose mitigation for potentially significant impacts of noise exposure during the airshow, especially to children. Warnings or suggestions to wear hearing protection would help to avoid hearing loss. Requesting Airshow vendors, exhibitors, first aid stations, and ticket booths to distribute or sell effective and inexpensive hearing protection, such as sponge type earplugs, would mitigate the short term and long-term hearing losses from Air Show flight noise. 14-3
- The Project Description should include a concise definition of the Project Area. The Project Area should include all areas where potentially significant noise, biological, or hazard impacts of the Project may occur. The Project Area should not be limited to the "Show Center Area" because the Air Show has clearly and significantly impacted areas well outside of the "Show Center Area" in previous years and there is no explanation, avoidance measure, or mitigation provided in the DEIR that would limit future impacts to just the "Show Center Area". 14-4
- The Project Area should include offshore and onshore areas below and adjacent to any planned or possible flight paths to and from any potential flight origin or destination. It is especially important that the EIR include areas adjacent to flight paths where flying may occur at anomalously low (non-commercial, non-standard) elevations that could significantly increase noise, biological, and hazard impacts. 14-5
- Impacts outside of the "Show Center Area", such as the documented historical impacts to protected species in the Bolsa Chica, and to human receptors near flight paths, should be discussed, assessed, and mitigated to the extent feasible. 14-6

- Historical Airshow impacts, such as the significant biological impacts (e.g., “takes” and “flushings” of protected species) and hazard impacts (e.g., electrical equipment interference) of previous Air Show operations should be reviewed in the EIR. The EIR should include specific proposed avoidance or mitigation measures for any such impacts in the future. A low-flying plane flushing flocks of birds from the Bolsa Chica could have resulted in a catastrophic bird strike … it seems cavalier, at best, not to address this historical “near miss” in the DEIR. It should be addressed in the EIR. 14-7

- The EIR should address the history of deviations from the Airshow’s “planned” flight paths, and the potential for future deviation from Airshow’s currently proposed flight paths, along with measures to avoid or mitigate future flight path deviation, especially in and around sensitive or hazardous receptor areas. 14-8

- The EIR should describe the specific types of aircraft to be flown, including the specific types of aircraft proposed for beach takeoffs and landings. 14-9

- The EIR should assess the potential biological and hazard impacts of beach landings and takeoffs and provide impact avoidance or mitigation measures to the extent feasible. 14-10

- Since many shorebirds are famously resistant to hazing, and/or exhibit only very short-term response to hazing, continuous and close on site biological monitoring, with direct communications to the flight controller, should take place before and during each beach landing and takeoff, to mitigate the potential significant biological and hazard impacts of bird strikes. 14-11

- The EIR should provide more information on the itinerary of events for each individual day, especially for flights, fireworks, and pyrotechnics which have the potential for greater impacts. 14-12

- The EIR should specify the types of items meant to be included as ‘pyrotechnics’; how, when, and where pyrotechnics will be operated; the potential impacts of pyrotechnics, and how impacts will be avoided or mitigated. 14-13

- THE DEIR addressed only the noise impacts and mitigation from amplified concert music noise. However, the Airshow has, in the past, generated significant noise impacts to biological and human resources from flights. The EIR should specifically address previous and potential future noise impacts from flights, fireworks, and pyrotechnics as well as from amplified concert music. 14-14

- The EIR should describe noise and noise impacts to attendees, wildlife, and human and biological receptors near flight paths from evening flights and pyrotechnics through the proposed 11:00 p.m. closing time or whatever time such noise will be ended each day. 14-15
- The EIR should assess and propose mitigation for the added impacts (including noise and hazards) to human receptors, protected species (particularly in the Bolsa Chica), and to pets due to the proposed 5-day event schedule. Extending the event into regular school and work weekdays may result in additional noise, safety, biological, and hazard impacts, as well as nuisance impacts. 14-16
- The EIR should specify what "streamers" are, what they are made of, their size, what potential impacts (e.g., biological, safety or fire hazards, etc.),they may pose, what happens to them when they are 'released' into the environment. Previously reported streamer impacts should be discussed and mitigation (such as streamer retrieval) for potential biological and hazard impacts should be included. 14-17

Best,

Susan Perrell

Seal Beach

Comment Letter 14: Susan Perrell

Response to Comment 14-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 14-2

As described in Chapter 4, *Alternatives*, pages 4-3 and 4-4, the Offsite Location Alternative and the Avoidance of Flying over Bolsa Chica Alternative were rejected because implementation is considered remote and speculative or some of the goals and objectives would not be met.

As described in Chapter 4, *Alternatives*, page 4-10, CEQA Guidelines require that, if the No Project Alternative is determined to be the environmentally superior alternative, an environmentally superior alternative must also be identified among the remaining alternatives. As such, the 2023 Airshow Alternative would result in the fewest environmental impacts as compared to the Project and is considered the Environmentally Superior Alternative. However, this alternative would not meet all of the Project Objectives. Furthermore, the 2023 Airshow Alternative would reduce the opportunity to gather since fewer events would be held over fewer days.

The 2023 Airshow Alternative would not meet the following Project objectives in their entirety:

- Continue to provide a family-oriented, safe, educational, fun, and entertaining Airshow experience with an emphasis on outdoor lifestyle and popular culture elements.
- Continue to provide a gathering place where locals and visitors can come together to enjoy civilian and military aircraft flybys and aerial acrobatics, illustrations, displays, food, and music.
- Create a net positive direct economic impact on the City and surrounding communities as a result of spending by incremental visiting attendees, the event organizer, and event sponsors.
- Increase in tax revenues (i.e., sales tax and transit occupancy tax) to the City.
- Continue to provide temporary and full-time jobs associated with the Airshow.

Since the 2023 Airshow Alternative would not include a music festival, helicopter and aircraft runway/display, skateboard/BMX competition, pyrotechnic shows, sandcastle building competition, and beach camping, among other activities/features, fewer family-oriented events would be offered. With fewer activities, it is anticipated that the positive economic impact, the potential tax revenues, and the number of employees needed to staff the Airshow would each potentially be reduced. In addition, without offering the events promoting the beach community, including beach camping and sandcastle building among others, there would be a reduced positive impact to the promotion of the Huntington Beach Pier and beaches.

Response to Comment 14-3

The City has received several comments on the health effects of noise. Multiple studies on the impacts of aircraft noise on public health have been undertaken and more studies are currently

underway[13], [14], [15] Research suggests that noise can have varying levels of effects on people. From these studies, criteria have been established to protect public health and safety and prevent disruption of certain human activities. These criteria are based on the effects of noise on people, sleep interference, and physiological responses.

Aircraft operations during future Airshows may temporarily exceed the City's established noise limits during daytime and nighttime hours, including noise sensitive land uses. Data collected during the 2023 Airshow indicates that noise levels could surpass the City's established noise limits by as much as 50 dB. However, these elevated noise levels are expected to be brief and not sustained over long periods.

At all times, the FAA, the Airshow, and pilots are committed to the safe operation of aircraft. While the pilot has ultimate control of the aircraft while in flight, the FAA has the primary role of ensuring safe and efficient use of the National Airspace System (NAS). Aircraft will adhere to predetermined flight path to avoid residential areas as much as possible. This includes having aircraft remain over water whenever operationally feasible to reduce noise exposure to area further inland from the coast. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 14-4

As described in the Chapter 2, *Project Description*, Section 2.1, Project Location, page 2-1, of the Draft EIR, the Airshow Performance Area, the primary area for civilian and military aircraft flybys and aerial acrobatics, is located adjacent to the Show Center Area over the Pacific Ocean with an east-west length of approximately 3,000 feet from the shoreline and a north-south length of approximately 12,000 feet. A majority of the civilian and military aircraft flybys and aerial acrobatics occur within approximately 500 and 1,500 feet from the shoreline. However, many of the aircraft maneuvers, particularly for the military, spill out into the TFR airspace controlled by the Airshow. The TFR, as issued by the FAA for the Airshow, is a five NM ring centered on the center of the Airshow's aerobatic box. The restricted airspace within the ring extends from the

[13] *The State of the Art of Predicting Noise-Induced Sleep Disturbance in Field Settings*, Fidell S., Tabachnick, B., Pearsons, K., Noise and Health, Volume 12, Issue 47, p. 77-87, 2010.

[14] *ACRP Synthesis 9, Effects of Aircraft Noise: Research Updated on Selected Topics*, Transportation Research Board of the National Academies, Airport Cooperative Research Program, 2008.

[15] *Request for Comments; Clearance of a New Approval of Information Collection: National Sleep Study*, U.S. Department of Transportation, Federal Aviation Administration, Agency Information Collection Activities, 84 Fed. Reg. 65453, November 27, 2019.

surface to 15,000 feet above MSL. Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.. Further, As noted in Section 3.2, *Biological Resources*, Section 3.2.1 Environmental Setting, pages 3.2-1 and 3.2.-2, the proposed flight path and a 500-foot buffer was examined. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 14-5

Refer to Master Response C and Response to Comment 14-4. For analysis regarding biological resources, hazards, and noise, refer to Section 3.2, *Biological Resources*, Section 3.3, *Hazards and Hazardous Materials*, and Section 3.4, *Noise*, of the Draft EIR.

Response to Comment 14-6

For a discussion on noise, refer to Response to Comment 5-3. For a discussion on nesting season, refer to Master Response C. For a discussion on biological monitoring, refer to Master Response D. Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 14-7

Biological monitoring is being implemented during take-offs and landings under Mitigation Measure HAZ-2 under Section 3.3, *Hazards and Hazardous Materials*, of the Draft EIR, to address potential hazard impacts associated with the Airshow. Section 3.3 further provides a wildlife hazard analysis including bird strikes.

For a discussion on noise, refer to Response to Comment 5-3. For a discussion on nesting season, refer to Master Response C. For a discussion on biological monitoring, refer to Master Response D. For a discussion on mitigation, refer to Response to Comment 2-15. Refer to Master Response B for a discussion of purported prior evidence submitted by the State Lands Commission and the California Department of Fish and Wildlife regarding biological impacts resulting from past Airshow events.

Response to Comment 14-8

As discussed in Chapter 2, *Project Description*, Section 2.6.4 Airport Origin, Airshow Flight Paths, and Airshow Performance Duration, page 2-10, the Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant

will request that that overflights occur at 1,000 feet AGL or higher. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. Many commenters have requested the avoidance of flights over the BCER and that any overflight of the BCER occur at an altitude of 1,000 feet AGL or higher. As stated above, all pre-flight briefings will include these exact requests made to all participating pilots. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that neither the Applicant nor the City possesses authority to restrict such activities.

While the Applicant can influence the sequence and timing of each performer's displays in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities. Refer also to Master Response A for a more detailed discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 14-9

For Airshow Performers, refer to Chapter 2, *Project Description*, pages 2-9 and 2-10 of the Draft EIR. The Airshow list of performers is subject to change each year for the Airshow.

Response to Comment 14-10

Prior to the start of the Airshow, Mitigation Measure HAZ-1 will be followed evaluating the potential risk of wildlife strikes at, specifically for the proposed temporary aircraft landing pad on the beach. Biological monitoring is also being implemented during take-offs and landings under Mitigation Measure HAZ-2 under Section 3.3, *Hazards and Hazardous Materials* to address potential hazards and inform recommendations associated with wildlife hazards at the Airshow.

Response to Comment 14-11

Refer to Response to Comment 14-10. For a discussion on biological monitoring, refer to Master Response D.

Response to Comment 14-12

As discussed in Chapter 2, *Project Description*, page 2-9, of the Draft EIR, from prior years, typically each day the Airshow begins around 10:00 AM with the MV-22 Osprey streamer drop, then the Orange County Fire Authority (OCFA) water drop, followed by the Australian Anthem, Canadian Anthem, and the United States Anthem, and then followed by the U.S. Navy Leap Frog Parachute Team with American Flag banner tow. The official start of the Airshow is immediately after, at approximately 10:30 AM, when the below-mentioned Airshow civilian and military performers display aircraft flybys and aerial acrobatics in designated time slots with the final performer being the U.S. Air Force Thunderbirds or the U.S. Navy Blue Angels concluding by 5:00 PM. Aircraft flight familiarization and flight practice flyovers could potentially occur as

early as 9:00 AM on Airshow event days. The Airshow performer schedule and the Airshow performers are subject to change each year for the Airshow.

Pyrotechnic daily shows could be discharged from either aircraft or discharged from the Huntington Beach Pier or an ocean barge and would occur during the days and hours of the Airshow. Pyrotechnic nightly shows could be discharged from either aircraft (nighttime flyovers) or discharged from the Huntington Beach Pier or an ocean barge and would conclude by 11:00 PM each evening of the Airshow. The schedule for pyrotechnics will be made available prior to each Airshow day and are subject to change each year for the Airshow.

Fireworks and pyrotechnics are addressed in Appendix B, *Initial Study* (see Section XIII, Noise, pages 3-44 and 3-45).

Response to Comment 14-13

Refer to Response to Comment 14-12.

Response to Comment 14-14

Refer to Response to Comment 14-3 and Response to Comment 14-5 with respect to future noise impacts from flights. Fireworks and pyrotechnics are addressed in Appendix B, *Initial Study* (see Section XIII, Noise, pages 3-44 and 3-45).

Response to Comment 14-15

Aircraft operations during future Pacific Airshow may temporarily exceed established noise limits, including during nighttime hours. Future events may feature nighttime demonstrations by advanced F-series fighter jets such as the F-15, F-18, and F-35. Data collected during the 2023 Airshow indicates that noise levels could surpass the City of Huntington Beach's standard noise thresholds by as much as 50 dB. However, these elevated noise levels are expected to be brief and not sustained over long periods.

To mitigate the impact of nighttime aircraft noise on the surrounding community, event organizers have integrated several noise-reduction strategies into the Airshow's planning. These include ensuring aircraft adhere to predetermined flight paths that are carefully designed to avoid residential areas whenever possible and keeping aircraft operations over water to the greatest extent feasible, reducing noise exposure for inland areas further from the coast. However, neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.. Refer also to Master Response A for a more detailed

discussion of how flight paths are determined and the protocols employed to reduce impacts to the BCER.

Response to Comment 14-16

Refer to Response to Comment 14-15.

Response to Comment 14-17

Refer to Response to Comment 2-19.

Comment Letter 15

From: Kathryn Sinacori <ksinacori@gmail.com>
Sent: Wednesday, March 12, 2025 8:04 AM
To: Hyland, Connor <connor.hyland@surfcity-hb.org>
Subject: Pacific Airshow DEIR Response

City of Huntington Beach

Attn: Connor Hyland, Senior Deputy City Attorney

2000 Main Street, 4th Floor

Huntington Beach, CA 92648

Connor.Hyland@surfcity-hb.org

March 12, 2025

I'm writing to represent the interests of my neighborhood when it comes to the Pacific Airshow. The Newport Shores is located within the city limits of Newport Beach, but very close to the Airshow event site. So much so that we suffer all of the negative effects of this annual nightmare without receiving any of the compensation or protection offered to the Huntington Beach residents who are also negatively affected. 15-1

Let's start by addressing the noise pollution. While the actual event is publicized to begin on a Friday and last through until Sunday, those of us who live under the flight path are aware that the deafening sounds usually begin on Tuesday. We get at least three extra days of this constant racket. When I tell you that I actually pray for foggy skies to at least limit the impact on my eardrums and nerves? I'm not joking. 15-2

Now let's move on to the complete lack of parking in my neighborhood during the actual Airshow. We are located close enough to the event site that people from all over Southern California take over our streets. They walk, bike or Uber to the event site once they park their vehicles, making it impossible for our residents to park our cars on the streets outside our own homes. As a beach-adjacent neighborhood, we're used to primarily using our 15-3

garages and sharing the streets with visitors. But this one weekend during the Pacific Airshow makes it feel like the 4th of July for three straight days. And not in a good way. These visitors, for the most part, seem to think our neighborhood is one big dumping ground for all the trash they don't want to bring home in their cars. They leave debris all over the sidewalks and gutters without a second thought.

15-3 (cont.)

The City of Newport Beach has made no attempt to mitigate the negative effects we experience during the Airshow. We aren't given any sort of permitted parking passes or additional trash services. We are expected to absorb the negative impact of the Pacific Airshow because 'people seem to like it'. And because Huntington Beach finds it very profitable.

15-4

I'm asking for your consideration as you evaluate the impacts of the Huntington Beach Pacific Airshow. Please keep in mind the safety of this Newport Beach neighborhood. We are not located under any commercial flight path, a fact which influenced my purchase of my home. Now all of a sudden, I'm underneath the worst sort of aircraft travel for one week out of every year with no protection or consideration from either Huntington Beach or even my own City officials here in Newport Beach. It's my understanding that rather than seek to mitigate the negative impacts of the Pacific Airshow, the event organizers just want to make everything bigger. Which reads to my eyes that they just want to make everything worse for those of us already forced to carry the burden of their event.

15-5

Kathryn Sinacori

463 62nd Street

Newport Beach, CA 92663

(949) 233-4736

ksinacori@gmail.com

Comment Letter 15: Kathryn Sinacori

Response to Comment 15-1

This comment is noted and included in the Project record. No response is required because the comment neither raises a significant environmental issue nor addresses the contents of the Draft EIR.

Response to Comment 15-2

Aircraft operations during future Airshows may temporarily exceed established noise limits. Data collected during the 2023 Airshow indicates that noise levels could surpass the City of Huntington Beach's standard noise thresholds by as much as 50 dB. However, these elevated noise levels are expected to be brief and not sustained over long periods. For further discussion on noise, refer to Response to Comment 5-3 and 5-4.

Response to Comment 15-3

The Applicant and City will continue to coordinate as applicable with neighboring jurisdictions that may be impacted with increases of vehicles along Pacific Coast Highway and surrounding streets. The Airshow typically utilizes approximately 500 parking spaces for production and staging of equipment beginning with the first day of setup and the last day of tear down. The use of parking is far less than other major events of this size and scale. Due to the vast availability of parking within the City of Huntington Beach and Huntington State Beach, including approximately 6,200 parking spaces in the immediate Project vicinity, this use of parking (approximately 8 percent of total available public access parking) has not had a significant impact on access and is not anticipated to have any future impacts. In addition, patrons arriving by vehicle are permitted to park within the Huntington Beach public parking areas, where the Applicant coordinates with the City to reserve parking spaces dedicated to Airshow attendees. All other details regarding parking will be governed by a future agreement between the City and the Applicant.

Response to Comment 15-4

According to the California Coastal Commission, the streets in question are within the Coastal Zone Boundary, where local jurisdictions are prohibited from restricting on street parking. The CCC has historically denied requests for residential permit parking programs within the Coastal Zone.

Refer to Response to Comment 15-3.

Response to Comment 15-5

The Applicant and City will continue to coordinate as applicable with neighboring jurisdictions that may be impacted with increases of vehicles along Pacific Coast Highway and surrounding streets.

Refer to Response to Comment 1-3, 5-3, and 15-3.

ECONOMIC & DEVELOPMENT SERVICES DEPARTMENT

April 7, 2025

Mr. Connor Hyland
Senior Deputy City Attorney
City of Huntington Beach
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648

Subject: City of Costa Mesa Request for Extension and Comments on the Pacific Airshow Draft Environmental Impact Report

Dear Mr. Hyland:

The City of Costa Mesa just learned about the public review period for the Huntington Beach Airshow Draft Environmental Impact Report (DEIR) from a community member last Friday. Assistant Director Scott Drapkin submitted a letter dated March 12, 2024 on behalf of the City in response to the Notice of Preparation, but subsequently did not receive any communication regarding the Notice of Availability for the DEIR public review period. As such, the City has been unaware that the DEIR was available for public review. 16-1

The City of Costa Mesa **respectfully requests an extension** of the public review period for at least 15 days for us to assess whether the DEIR addressed the comments presented in the City's letter of March 12, 2024.

In an effort preserve the City's ability to review the DEIR, the City provides the following preliminary questions and comments. The City would like to reserve the right to provide additional comments or amend the following comments, if the time extension is granted.

City of Costa Mesa Preliminary Comments on the DEIR

1) **Notification.** California Environmental Quality Act (CEQA) Guidelines Section 15087 indicates that notices shall be mailed to the last known name and address of all organizations and individuals who have previously requested such notice in writing. Please include in your response and the Final Environmental Impact Report the names and addresses of all individuals who have requested such notice. As noted above, the City of Costa Mesa submitted a letter in response to the Notice of Preparation, but did not receive notification that the DEIR was available for review. 16-2

2) **Consultations.** CEQA Guidelines Section 15086(4) indicates that the lead agency shall consult with and request comments on the draft EIR from any city or county which borders on a city or county within which the project is located. The City of Costa Mesa borders Huntington Beach to the east. The City of Costa Mesa did not receive requests for consultation nor did we receive notification of the DEIR requesting comments. We respectfully request an extension of the public review period to allow compliance with CEQA and opportunity for consultation. 16-3

3) **Deficient Study Area.** As indicated in Section 2.1 and Figure 2-3, aircraft will fly overhead within a temporary flight restriction (TFR) airspace, which is five nautical mile radius from the Airshow Performance Area. A portion of the City of Costa Mesa is within the TFR airspace. Much of the DEIR focuses on the Airshow Performance Area as the study area for the DEIR, however, the impacts are more applicable to the entire TFR. The TFR should be the study area for the DEIR. 16-4

4) **Biological Resources.** The boundary for the Biological Study Area (BSA) is co-terminus with a planned flight path and does not identify biologically-sensitive areas. However, Section 2.1 indicates that many of the aircraft maneuvers, particularly for the military (whose aircraft are also the loudest) spill out into the TFR and Section 2.6.4 states that flight paths are subject to change. To adequate analyze impacts on biological resources, the BSA should encompass the entire TFR airspace to assess all possible impacts to biological areas and habitats. It is not reasonable to assume that the BSA has adequately studied impacts to biologically-sensitive areas, when the BSA mirrors the flights paths that are subject to change and spillover. 16-5

   The City of Costa Mesa previously identified several biologically sensitive areas in Fairview Park. Specifically, in Fairview Park, there are two Nationally Registered Cultural Resource Historic Sites and five distinct habitat ecosystems, adjacent to the Santa Ana River. Although identified during the scoping process, Fairview Park has not been included in the BSA. The City requests that the BSA be expanded to the footprint of the TFR, which is where flight activity will occur during the duration of the airshow. At a minimum, the City requests that the BSA be expanded to include all open spaces within the TFR, including but not limited to Fairview Park, the Frank and Joan Randall Preserve, Talbert Regional Park, and Canyon Park.

5) **Fuel Dumps.** Page 3.2-44 - Fuel Dump - of the DEIR indicates that if jettisoned at a high enough altitude in above freezing temperature, the evaporation rate calculations show that over 90% will evaporate before reaching the ground. 16-6

a. The stated altitudes in the TFR are "at or below" 500 feet. In aviation, high altitude is defined as above 25,000 feet above mean sea level. Therefore, it is not appropriate to use "high altitude" as a threshold in a TFR airspace associated with an airshow as it does not lead to conclusions that are relevant to the Project circumstances.

b. Please explain the impacts from the 10% (from high altitude) of fuel that does not evaporate.

c. Please revise the analysis of fuel dump analysis to reflect the realistic altitudes within the TFR during an airshow.

d. Since likely receptors in a fuel dump range from birds to marine mammals and fish, please include mitigation for the Project if this happens, such as a remediation or clean fee. Simply concluding that it is not likely to happen is not a suitable conclusion or mitigation.

16-6 (cont.)

6) Hazards and Hazardous Materials. There can be accidents at airshows. In the past 10 years, there have been a range of 8-12 accidents per year at airshows. (https://en.wikipedia.org/wiki/List_of_air_show_accidents_and_incidents_in_the_21st_century) The DEIR does not analyze any scenario for which aircraft flying over the City of Costa Mesa encounter an accident or incident, such as a mid-air collision, collision with ground, mechanical failure, or fuel dump. Please include an analysis of possible hazards from aircraft flight in the TFR over the City of Costa Mesa, including potential hazards, cleanup, and emergency response.

16-7

7) Deficient Noise Analysis. Section 3.4 indicates that the Noise analysis focuses on aircraft noise associated with the flyovers during the 2023 Airshow, noise from amplified speakers, and traffic noise from an increase in vehicle trips to the Project. The Noise Analysis only analyzes locations within the City of Huntington Beach and does not include locations within the City of Costa Mesa where noise from aircraft will likely be heard (within the TFR). Please expand the noise analysis to include areas within the City of Costa Mesa impacted by aircraft noise.

Under Section 3.4.6.1, Impact 3.4-1 indicates that "The Project would result in a significant impact if it would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies." [*emphasis added.]* The Noise Analysis indicates that Airshow activity will generally exceed noise standards and refers to the Huntington Beach Noise

16-8

Deviation Permit as a way of allowing exceedance. The availability of a permit to deviate does not signify adequate mitigation, unless the environmental analysis for the creation of the Noise Deviation Permit itself properly mitigated for future deviations. Therefore, each project's impacts must be analyzed and if significant, mitigated. The Noise Deviation Permit does not permit exceedances of noise levels in adjacent jurisdictions. The City of Costa Mesa is open to discussing mitigation measures from noise impacts caused by airshow noise.

Lastly, there is evidence in Figures 2 to 9 contained within the Aviation Noise Technical Report (ANTR) that identifies areas within the City of Costa Mesa where aircraft from the airshow causes conditions that exceed the City of Costa Mesa's Noise Ordinance. These areas should be analyzed in accordance with the City of Costa Mesa's Noise Ordinance, available at the following weblink: https://ecode360.com/42619123 Please identify mitigation measures to address these impacts.

16-8 (cont.)

8) **Aircraft Noise.** The Aviation Noise Technical Report (ANTR) endeavors to study a selection of aircraft including "seven (7) fixed wing and rotor aircraft that are anticipated to create the most noise exposure over the course of the Airshow". Table 1 – Model Noise Results then displays the noise level for each individual aircraft type in flight. The analysis fails to consider the well-known and documented airshow components, such as multiple aircraft events like flight demonstration teams and heritage flights. For example, the F/A-18 Super Hornets flown by the Blue Angels are rated as the second loudest aircraft (96.3 dB) in the ANTR, but their formations can include four to six aircraft flying simultaneously. The EIR should explain how this noise level was accounted for.

16-9

9) **Aircraft Noise Data.** Page 3.4-14 of the DEIR indicates that measurement data for the duration of the 2023 Airshow was recorded in Appendix E. We were unable to locate the actual measurement data in Appendix E. Table 1 in Appendix E indicated noise level from individual aircraft, but that does not correspond to some of the observations from the 2023 Airshow in Section 3.4. Since Appendix E is the basis for the Noise Analysis, the ability to review the data is critical to verify the Noise Analysis.

16-10

10) **Transportation.** Section 2.6.6 of the Project indicates that State Route 55 to Pacific Coast Highway is one of the primary vehicular travel corridors to access the Show Center area. State Route 55 runs through Costa Mesa. However, the transportation analysis in Section 3.5 of the DEIR is limited to the boundary of Huntington Beach. Given that the travelers to and from the airshow are expected to generate additional volume on the City of Costa Mesa's transportation infrastructure, provide an analysis

16-11

on transportation circulation and emergency access throughout the City of Costa Mesa for the duration of the Airshow. 16-11 (cont.)

11) **Request for future notification.** We formally request notification of the availability of any future documents associated with the Project, along with any public meetings and public hearing both within and outside the scope of the CEQA component. 16-12

The City of Costa Mesa thanks the City of Huntington Beach for the opportunity to comment on the DEIR to fully analyze and disclose environmental impacts that the Pacific Airshow may have on the City of Costa Mesa. As indicated earlier, the City of Costa Mesa would appreciate an extension of time for the public review period in order to more thoroughly review the DEIR and consult with Huntington Beach on this Project. 16-13

Sincerely,

Carrie Tai, AICP
Economic and Development Services Director
City of Costa Mesa

CC:
Mayor John Stephens
Councilmember Arlis Reynolds
Lori Ann Farrell Harrison, City Manager
Cecilia Gallardo-Daly, Assistant City Manager
Alma Reyes, Deputy City Manager
Scott Drapkin, Assistant Director, Development Services

Attachments – March 12, 2024 Scoping Letter

CITY OF COSTA MESA

P.O. BOX 1200 • 77 FAIR DRIVE • CALIFORNIA 92628-1200

ECONOMIC AND DEVELOPMENT SERVICES DEPARTMENT

March 12, 2024

City of Huntington Beach
Office of the City Attorney
2000 Main Street, Fourth Floor
Huntington Beach, CA 92648
Attn: Connor Hyland, Senior Deputy City Attorney

Subject: City of Costa Mesa Comments on the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Pacific Airshow Huntington Beach Project

Mr. Hyland,

The City of Costa Mesa has reviewed the Initial Study/Notice of Preparation for the Pacific Airshow Huntington Beach Project. Except during the Covid-19 pandemic of 2020, this event has been held annually since 2016. And, because of our proximity, the City of Costa Mesa is familiar with the annual airshow event.

16-14

Additionally, the nature of the airshow and environment in which it occurs is such that the extent of its activities (for example, flybys and aerial acrobatics) must begin and end at destinations located beyond the show center area. Airplanes must be staged at destinations miles away from the viewing area and flight patterns occurring as part of the show often result in overflights within the limits of the City of Costa Mesa that would not otherwise occur. Costa Mesa's adjacency to Huntington Beach, the air show flight patterns, and potential circulation issues give rise to several environmental concerns that have the potential to impact the City of Costa Mesa and its residents. These concerns, which requires addressing in the project's environmental impact report (EIR), include, but are not limited to:

1. **<u>Biological Resources</u>**

   Fairview Park in the City of Costa Mesa is located between John Wayne Airport and the event space. Fairview Park is about 208 acres and consists of 195 acres of natural open space and 13 acres of manicured landscape. With the natural open space, there are two Nationally Registered Cultural Resource Historic Sites and five distinct habitat ecosystems, which are home to many rare and endangered plant and animal species. The park is also adjacent to the Santa Ana River.

The City of Costa Mesa appreciates that the Initial Study acknowledges that two of the six impact areas are likely to have a potentially significant impact and will be studied in the project's EIR. However, we also believe that the Initial Study's determination of no impact upon riparian habitats or other natural communities and wetlands is not accurate. We request that the project EIR's scope include additionally analysis of potential impacts upon these two topic areas given the proximity of Fairview Park, its habitat, its sensitive species, and on-site wetlands to the event and location under or near to overflight routes.

2. Noise

The Initial Study indicates that noise impacts are subject to the noise standards of the City of Huntington Beach's Noise Ordinance. However, noise impacts that occur within Costa Mesa's city limits should be evaluated against the standards of Costa Mesa's Noise Ordinance to determine if an impact is present or not. Additionally, the noise analysis should assess the impact of flyover noise upon flora and fauna species located at Fairview Park.

3. Transportation

A substantial number of people will utilize freeways and roadways located in the City of Costa Mesa to attend the airshow in Huntington Beach. These will include the 405 freeway, the 55 freeway, the 73 toll road, and various north-south and east-west surface roads that provide access across Costa Mesa connecting it with Huntington Beach.

The concentrated duration of this event during specific hours of each day during the several day event will intensify demand on our roadways and will likely lead to further congestion above normal levels. This congestion will cause vehicle delays and contribute more emissions into the air.

16-14 (cont.)

The City of Costa Mesa requests that a full assessment of these impacts be included in a project traffic study to assess the project's contribution and to identify alternative transportation modes, including the use of shuttles or similar mass transit options to relieve congest while facilitating the movement of large numbers of people (over 700,000 total people in the past) into and out of the event center multiple times a day for several consecutive days.

4. Air Quality & Greenhouse Gas Emissions

The Initial Study acknowledges that John Wayne Airport will be used as a staging area for some of the aircraft used during the airshow. John Wayne Airport is adjacent to the City of Costa Mesa. We appreciate that the project's Initial Study acknowledges that there could be a potentially significant impact related to criteria pollutants and that this concern will be studied in the EIR.

However, we believe that the Initial Study improperly concludes that there will be a less than significant impact in the areas of 1) exposure of sensitive receptors to substantial pollutant concentrations, and 2) other adverse emissions that may affect a substantial number of people.

As such, the City of Costa Mesa requests that the project EIR also fully study these concerns to ensure that flyovers from aircraft staged at John Wayne Airport and those that will overfly Costa Mesa airspace during their performance are assessed and disclosed to the public and decisionmakers.

Similarly, the project also needs to fully assess and disclose potential impacts upon greenhouse gas emissions from vehicle travel related to ingress and egress for equipment, concessions, attendance on each day of the event; including the emissions generated by each of the aircraft used each day of the event.

5. Hazards and Hazardous Materials

The City of Costa Mesa believes that all topic areas related to hazards and hazardous materials need to be disclosed in the project's EIR. This event will result in aircraft overflights of portions of the City of Costa Mesa that have homes, businesses, and other recreation areas located on the ground below. The nature of emissions from high-performance aircraft upon persons on the ground below should be disclosed and understood to determine what, if any, short-term or long-term potential impacts may result. Additionally, the project EIR should make an attempt to ascertain the hazard potential associated with an unexpected mid-air collision or mechanical failure, including identifying the fallout zone, to people and property between the venue and John Wayne Airport and along the performer's flight pattern.

16-14 (cont.)

6. Tribal Cultural Resources

Fairview Park is home to an important archaeological site (4-ORA-58) for the protection of Costa Mesa's indigenous heritage containing what is believed to be one of the largest known Native American sites in the region that was occupied for at least 3,000 years. As it is currently written, the Initial Study fails to identify this resource that is present very close to the event center and certainly under the flight patterns that will occur throughout the week of the airshow. Unless and until archaeological site (4-ORA-58) is discussed in the Initial Study and the project EIR, the analysis and its conclusions are considered incomplete. Please amend the Initial Study to acknowledge the presence of this cultural resource and provide analysis to whether or not there may be a direct or indirect impact.

7. **Mandatory Findings of Significance**

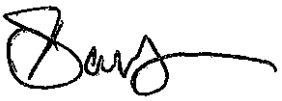
   Based on the above comments, the mandatory findings of significance should be updated but still reflect a potentially significant environmental impact resulting in the need to prepare a thorough and complete project level EIR.

Again, Costa Mesa thanks the City of Huntington Beach for this opportunity to offer our suggestions on the Initial Study including the need for additional analysis to properly assess and fully disclose the potential impacts of, mitigation measures for, and alternatives to the impacts that the Pacific Airshow may have upon the City of Costa Mesa and its residents and businesses.

Please let me know if you have any questions.

Sincerely,

16-14
(cont.)



Scott Drapkin
Assistant Director of Development Services
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cc: City of Huntington Beach
Community Development Department
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Huntington Beach, CA 92648
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ESA
420 Exchange, Suite 260
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Attn: Brian Allee, Project Manager

Comment Letter 16: City of Costa Mesa

Response to Comment 16-1

The City of Costa Mesa is included in the City of Huntington Beach's interested parties list and, as such, was notified of release of the Pacific Airshow Draft EIR. The City of Costa Mesa submitted a letter to the City of Huntington Beach on April 7, 2025, providing initial comments on the Draft EIR and also requesting a 15-day extension to prepare additional comments. In response, the City of Huntington Beach sent an email to Carrie Tai, AICP, Director, City of Costa Mesa, on April 9, 2025, providing the requested 15-day extension until April 21, 2025, to receive additional comments. The City of Huntington Beach never received a second comment letter or a further response after the extension.

In addition, the City of Costa Mesa submitted a comment letter on the Notice of Preparation of the Pacific Airshow Draft EIR on March 12, 2024, which was provided after the Notice of Preparation public review deadline of March 4, 2024; nonetheless, the City of Huntington Beach did consider the comments provided when preparing the Draft EIR.

Response to Comment 16-2

Refer to Response to Comment 16-1 in terms of the City of Costa Mesa's notification of the Pacific Airshow Draft EIR. The City of Huntington Beach made its best attempt to notify and grant extension to the City of Costa Mesa. The City of Huntington Beach chooses not to include the names and addresses of organizations and people who have previously requested notification regarding the Pacific Airshow Project. Any interested party may request the information through a Public Records Act Request.

Response to Comment 16-3

Please refer to Response to Comments 16-1 and 16-2.

Response to Comment 16-4

As described in the Chapter 2, *Project Description*, Section 2.1, Project Location, page 2-1, of the Draft EIR, the Show Center Area is the location where primary on-the-ground events and activities of the Airshow take place. Locally, the approximate boundaries of the Show Center Area from northwest to southeast are 7th Street and Pacific Coast Highway (State Route 1 or SR-1) to Beach Boulevard (State Route 39 or SR-39) and Pacific Coast Highway to the Pacific Ocean including a portion of the Huntington Beach Pier landward of the State Lands Commission mean high tide line. The Airshow Performance Area, the primary area for civilian and military aircraft flybys and aerial acrobatics, is located adjacent to the Show Center Area over the Pacific Ocean with an east-west length of approximately 3,000 feet from the shoreline and a north-south length of approximately 12,000 feet. A majority of the civilian and military aircraft flybys and aerial acrobatics occur within approximately 500 and 1,500 feet from the shoreline. However, many of the aircraft maneuvers, particularly for the military, also occur into the temporary flight restriction (TFR). The TFR, which is issued by the Federal Aviation Administration (FAA) for the Airshow, is a five nautical mile (NM) ring centered on the center of the Airshow's aerobatic box. The restricted airspace within the ring extends from the surface to 15,000 feet above mean

sea level (MSL). Neither the Applicant (the Airshow operator) nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by terminal radar approach control (TRACON)[16], and pilot training related to highly choreographed Airshow sequences by military display teams. While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the pilot in charge (PIC) subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities. The Show Center Area and Airshow Performance Area collectively comprise of the Project Site.

Response to Comment 16-5

As discussed under Response to Comment 16-4, the TFR spans a 5 nautical mile radius and extends from the surface up to 15,000 feet MSL. This restriction is specifically designed to keep commercial and general aviation aircraft out of the designated Airshow airspace. By doing so, the TFR allows Airshow participants to safely reposition their aircraft within the restricted airspace for their performances, eliminating the risk of conflicts with unauthorized aircraft. At all times, the FAA, the Applicant, and pilots are committed to the safe operation of aircraft. While the pilot has ultimate control of the aircraft while in flight, the FAA has the primary role of ensuring safe and efficient use of the National Airspace System (NAS). While aircraft will adhere to the predetermined flight path as much as possible, there may be instances when a pilot needs to make a different decision while in flight to ensure safety.

As noted in Section 3.2, *Biological Resources*, Section 3.2.1 Environmental Setting, pages 3.2-1 and 3.2-2, the proposed flight path and a 500-foot buffer was examined. As such, the biological study area (BSA) does not include the Frank and Joan Randall Preserve, Fairview Park, Talbert Regional Park, or Canyon Park. Additionally, biological monitoring and surveys have been conducted prior to and during the 2023 Airshow to identify potential impacts on bird behavior and none were observed. The Draft EIR also determined that the temporarily impacted areas would not significantly inhibit local or regional movement of wildlife to, from, or within Frank and Joan Randall Preserve, Fairview Park, Talbert Regional Park, or Canyon Park. Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior pilot training related to highly choreographed Airshow sequences by military display teams.

As required by FAA regulations, a PIC is directly responsible for the safe operation of their aircraft and safety of each flight, including any/all passengers and crew. A PIC is the final authority of their aircraft's operation and may deviate from any regulation in 14 CFR, Part 91, Subpart A (General) and Subpart B (Flight Rules) as required to maintain flight safety. While the

[16] TRACON is an FAA air traffic control facility using radar and air/ground communications to provide approach control services to aircraft arriving, departing, or transiting the airspace controlled by the facility.

Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Response to Comment 16-6

According to Section 3.2, *Biological Resources*, pages 3.2-44 and 3.2-45 of the Draft EIR, there is a low probability potential for an emergency fuel dump from aircraft in the air for safety reasons. Typically, most of the fuel that is released turns into vapor within a few minutes. If jettisoned at a high enough altitude in above freezing temperature, evaporation rate calculations show that over 90 percent will evaporate before reaching the ground. The fuel vapors typically rapidly dissipate and diffuse in the atmosphere. A typical F/A-18 super hornet has a fuel capacity of approximately 2,000 gallons and might require release of approximately half of that for emergency reasons, which would result in a hypothetical fuel dump of approximately 1,000 gallons of which 100 gallons may reach the nearshore/offshore area of the Huntington Beach area. This would be considered a minor discharge and potentially result in a light surface sheen that would quickly evaporate. It is important to note that these same risks exist with all aviation overflights, not just those from the Airshow, including daily commercial flights that currently occur within the Project area. In the very unlikely event that a fuel dump should occur, the Applicant will work closely with the U.S. Coast Guard to coordinate any potential response, clean up, and messaging efforts.

Response to Comment 16-7

Huntington Beach Police are the lead public safety agency for the event. They serve as a conduit to coordinate significant mutual aid and planning with all other public safety agencies including the Federal Bureau of Investigation (FBI), Homeland Security, Orange County Intelligence Assessment Center (OCIAC), Orange County Sheriffs, U.S. Coast Guard, FAA, TRACON, Anaheim Police, Long Beach Fire, and many other agencies. In the very unlikely event of an accident or emergency such as a mid-air collision, collision with ground, mechanical failure, or fuel dump, the Applicant will work closely with the applicable public safety agencies and emergency personnel to coordinate any potential emergency response and messaging efforts.

Response to Comment 16-8

The City of Huntington Beach acknowledges the City of Costa Mesa's concerns regarding noise impacts from aircraft operations associated with the Airshow. Based on data from the 2023 event and the Aviation Noise Technical Report (ANTR), aircraft noise may temporarily exceed Costa Mesa's established limits by up to 50 dB, including in noise-sensitive areas, but are expected to be brief and not sustained. Aircraft operations during the Airshow are governed by FAA regulations, with flight paths and altitudes determined by ingress/egress routes, air traffic separation requirements, and pre-established choreography for safety. While the Applicant can influence performance timing and sequencing, actual flight decisions are made by the PIC in coordination with FAA radar facilities. Aircraft are directed to remain over water whenever operationally feasible to reduce inland noise exposure; however, neither the Applicant nor the

City of Huntington Beach can mandate specific flight paths or altitudes. For further detail, refer to Master Response A.

Response to Comment 16-9

The Aviation Noise Technical Report (ANTR) was designed to identify the maximum potential extent of noise exposure from individual aircraft types anticipated during the Airshow. While Table 1 presents modeled noise levels for seven representative aircraft, the analysis does not reflect cumulative noise from multi-aircraft formations such as flight demonstrations. This is because precise modeling of cumulative noise effects would require precise data on flight track locations, altitudes, and timing for each aircraft in formation, and this information is not available prior to the event due to the dynamic nature of airshow choreography and FAA-controlled airspace. However, aircraft noise from multiple sources would be additive in the same way as any other noise source with multiple events occurring at the same time. For instance, should multiple flights of the same aircraft occur during an event, the doubling of aircrafts would result in a 3 dBA increase.

The ANTR complements the monitored data collected during the 2023 Airshow through on-site noise monitoring. The measurements provide a "real-world" representation of actual noise exposure experienced by surrounding communities, including during multi-aircraft performances. The combination of modeled and monitored data ensures that the analysis reflects both theoretical maximums and observed conditions, allowing for a more comprehensive understanding of potential noise impacts.

Response to Comment 16-10

The most recent Noise Monitoring Technical Report dated December 2023, which contains the measurement data collected during the 2023 Airshow, was inadvertently omitted from Appendix E, of the Draft EIR. A previous version of the Noise Monitoring Technical Report dated September 2023 was included in the Draft EIR. While Table 1 in Appendix E from the September 2023 Noise Monitoring Technical Report presents modeled noise levels for individual aircraft, it does not reflect the full scope of observed conditions that were collected during the 2023 Airshow and were included in the analysis provided in Section 3.4 of the Draft EIR. To address this, the Noise Monitoring Technical Report dated December 2023, including all raw measurement data collected during the 2023 event, has been included in Chapter 4, *Corrections and Additions*. The replacement of the most recent Noise Monitoring Technical Report does not alter the analysis or conclusions of the Draft EIR..

Response to Comment 16-11

Section 2.6.6 of the Draft EIR describes "State Route 55 (SR-55) to Pacific Coast Highway" as one of the primary vehicular travel corridors potentially used by attendees to access the Airshow, without prediction of the level of usage. Traffic count data was collected at the three access points that connect Costa Mesa and Huntington Beach during the 2023 Airshow: Adams Avenue (Location C), Hamilton Avenue/Victoria Street (Location D), and Pacific Coast Highway (Location J); refer to Figure 3.5-1, Map of Daily Vehicle County Locations, in the Draft EIR.

Table 3-1 below summarizes the daily traffic volumes at the three access point locations (C, D, & J) on Friday, Saturday, and Sunday without and with the Project.

TABLE 3-1
SUMMARY OF DAILY TRAFFIC VOLUMES AT THE THREE ACCESS POINT LOCATIONS

Location ID	Fri Non-Airshow	Sat Non-Airshow	Sun Non-Airshow	Fri Airshow	Sat Airshow	Sun Airshow
C – Adams Ave	15,856	14,162	9,931	16,746	15,456	12,958
D – Hamilton Ave/ Victoria St	31,607	28,664	23,086	32,178	29,729	26,515
J – Pacific Coast Highway	43,524	38,959	34,124	42,872	35,262	32,436
Total	**90,987**	**81,785**	**67,141**	**91,796**	**80,447**	**71,909**

Table 3-2 below provides the change in daily volumes and percentage difference without and with the Project.

TABLE 3-2
CHANGE IN DAILY VOLUMES WITH AND WITHOUT THE PROJECT AT THE THREE ACCESS POINT LOCATIONS

Location ID	Fri Volume Change	Sat Volume Change	Sun Volume Change	Fri % Change	Sat % Change	Sun % Change
C – Adams Ave	890	1,294	3,027	5.6%	9.1%	30.5%
D – Hamilton Ave/ Victoria St	571	1,065	3,429	1.8%	3.7%	14.9%
J – Pacific Coast Highway	(652)	(3,697)	(1,688)	-1.5%	-9.5%	-4.9%
Total	**809**	**(1,338)**	**4,768**	**0.9%**	**-1.6%**	**7.1%**

The daily traffic volume along PCH during the Airshow weekend was lower than that of the non-Airshow (baseline) weekend. This does not indicate that no Project-related traffic used PCH, but rather the net result was a reduction in traffic, likely due to some reduction in trips unrelated to the Project.

While the daily total volume increased at locations C and D during the Airshow, the magnitude of change is comparable to other special events in the region which cause similar fluctuations in traffic volumes.

For example, **Table 3-3** below compares the daily traffic volumes during non-Orange County Fair (OC Fair) weekends (baseline) and weekends during the OC Fair using Streetlight, a form of anonymized location-based data sourced from cell phones and GPS units on individual vehicles. Traffic volume at the same three locations (C, D, and J) without the Fair, consisting of the average daily values between 6/19/2024 to 7/18/2024, was compared with weekends during the OC Fair, represented by the average daily values between 7/19/2024 to 8/18/2024.

TABLE 3-3
DAILY TRAFFIC VOLUMES DURING NON-ORANGE COUNTY FAIR (OC FAIR) WEEKENDS (BASELINE) AND OC FAIR WEEKENDS AT THE THREE ACCESS POINT LOCATIONS

Location ID	Average Fri Non-OC Fair	Average Sat Non-OC Fair	Average Sun Non-OC Fair	Average Fri OC Fair	Average Sat OC Fair	Average Sun OC Fair
C – Adams Ave	38,068	32,242	22,967	39,748	34,529	27,133
D – Hamilton Ave/ Victoria St	34,469	29,528	22,909	33,273	29,813	25,472
J – Pacific Coast Highway	54,574	49,047	37,788	51,442	46,888	39,796
Total	**127,111**	**110,817**	**83,664**	**124,463**	**111,230**	**92,401**

Table 3-4 below summarizes the change in total daily volume and the percentage difference between baseline and OC Fair activities.

TABLE 3-4
CHANGE IN TOTAL DAILY TRAFFIC VOLUMES AND PERCENTAGE DIFFERENCE DURING NON-OC FAIR AND OC FAIR WEEKENDS AT THE THREE ACCESS POINT LOCATIONS

Location ID	Fri Volume Change	Sat Volume Change	Sun Volume Change	Fri % Change	Sat % Change	Sun % Change
C – Adams Ave	1,680	2,287	4,166	4.4%	7.1%	18.1%
D – Hamilton Ave/ Victoria St	(1,196)	285	2,563	-3.5%	1.0%	11.2%
J – Pacific Coast Highway	(3,132)	(2,159)	2,008	-5.7%	-4.4%	5.3%
Total	**(2,648)**	**413**	**8,737**	**-2.1%**	**0.4%**	**10.4%**

In summary, the level of increase from the Project was modest (7.1 percent) over the course of the three-day (1 weekend) event and less than what is experienced by the OC Fair (10.4 percent) over 30 days (5 weekends) that the OC Fair is active.

Response to Comment 16-12

The City of Costa Mesa is included in the City of Huntington Beach's interested parties list and will receive notification of the availability of any future documents associated with the Project, along with any public meetings and public hearings.

Response to Comment 16-13

Please refer to Response to Comments 16-1 and 16-2.

Response to Comment 16-14

The City of Costa Mesa's comment letter dated March 12, 2024, provides comments on the Notice of Preparation of the Draft EIR. Accordingly, this Response to Comments document responds to comments that were specifically raised on the Draft EIR in the City's comment letter dated April 7, 2025, rather than the Notice of Preparation comment letter; however, the comments provided on the Notice of Preparation were considered when preparing the Draft EIR.

CHAPTER 4
Corrections and Additions to the Draft EIR

This chapter contains a compilation of revisions made to the text of the Draft EIR either in response to a comment or as initiated by the City. Some of the staff-initiated text changes are made in reflect additional information provided by the Applicant as part of the Coastal Development Permit (CDP) process for the Pacific Airshow. The text changes made in responses to comments and the staff-initiated text changes do not alter the analysis or conclusions in the Draft EIR.

All revisions are previously introduced in Chapter 3 of this Final EIR but are summarized here for convenience of the reader. Where the responses indicate additions or deletions to the text of the Draft EIR, additions are indicated in underline and deletions in ~~strikeout~~.

4.1 Text Changes Made in Responses to Comments

Chapter 2, Project Description

Section 2.6.4, Airport Origin, Airshow Flight Paths, and Airshow Performance Duration

Pages 2-10 and 2-11

The Airshow airport origins, Airshow flight paths, and Airshow performance durations are subject to change each year for the Airshow. As discussed above, future Airshows are anticipated to be held annually for three (3) days to up to five (5) days, generally Friday through Sunday or up to Wednesday through Sunday, with aircraft flight familiarization and flight practice flyovers beginning as early as Monday of the week of the Airshow. A majority of the aircraft originate from, but are not limited to, the Joint Forces Training Base Los Alamitos Airfield (KSLI) located in Los Alamitos, California (approximately 12 aircraft in 2023) and John Wayne Airport (SNA) located in Santa Ana, California (approximately 9 aircraft in 2023). Other airports to originate one to two aircraft are March Air Reserve Base (RIV) located Riverside County (approximately 2 aircraft for 2023), Fullerton Municipal Airport (FUL) located in Fullerton, California (1 aircraft for 2023), Los Angeles International Airport (LAX) located in Los Angeles, California (1 aircraft for 2023), San Diego International Airport (SAN) located in San Diego, California (0 aircraft for 2023), Channel Islands Air National Guard Station located at Port Hueneme, California (1 aircraft for 2023), and Edwards Air Force Base (EDW) located in Kern County (1 aircraft for 2023). Many of the aircraft, particularly the larger ones, hold out over the water and only make a few passes in front of the Show Center Area before returning to their origin airports. Typically, the duration of the aircraft over the Show Center Area ranges between approximately two minutes to up to 45 minutes.

Numerous daily flights by commercial and private aircraft currently fly over the BCER and helicopters regularly land at a helipad located within the BCER. However, the Project could increase the amount of air traffic that occurs over the BCER. The Applicant will provide mandatory in-person or virtual daily formal briefings each day of the Airshow to all participating pilots about the location, nature, and sensitivity of the BCER and will request avoidance of both overflights and streamer drops over this area. In addition, the Applicant will advise Southern California Terminal Radar Approach Control Facilities (TRACON) and the Joint Forces Training Base Los Alamitos Airfield Tower on the location, nature, and sensitivity of the BCER and will request avoidance of overflights in this area. The Applicant will work with Southern California TRACON to establish routes in/out of the Airshow airspace and supporting airfields to avoid overflight of the BCER. When overflights of the BCER cannot be avoided, the Applicant will request that such overflights occur at 1,000 feet above ground level or above. While it is the desire of the Applicant to avoid incursions over the BCER, it is important to note that the Applicant possesses no authority to restrict such activities. ~~Because pilots could be instructed by the to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. The Airshow airport origins, Airshow flight paths, and Airshow performance durations are subject to change each year for the Airshow.~~

Neither the Applicant nor the City of Huntington Beach can dictate or restrict flight paths or elevation (i.e., altitude). The determination of flight paths and altitudes are dictated predominantly by ingress and egress routes to/from the Airshow Performance Area, required vertical and horizontal separation from other air traffic as directed by TRACON, and prior training related to highly choreographed Airshow sequences by military display teams.

As required by FAA regulations, a pilot in command (PIC) is directly responsible for the safe operation of their aircraft and safety of each flight, including any/all passengers and crew. A PIC is the final authority of their aircraft's operation and may deviate from any regulation in 14 CFR, Part 91, Subpart A (General) and Subpart B (Flight Rules) as required to maintain safety of flight.

While the Applicant can influence the sequence and timing of each performer's display in the overall Airshow lineups, all decisions made during a flight sequence, including the flight paths and altitudes, are individual to the PIC subject to safety of flight considerations and other factors as communicated to the pilot from the appropriate supporting radar facilities.

Because pilots could be instructed by the air traffic control (ATC) to fly over the BCER due to these factors above, preactivity surveys and biological monitoring will be conducted each year to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. Further, future Airshow and applicable Airshow activities (i.e., Airshow set up and site breakdown, aircraft flight familiarization and

flight practice flyovers will not begin prior to September 15 each Airshow year. The specific monitoring efforts will include the following:

- A qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) will conduct a preactivity survey of the areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area. These surveys will occur one day before any pre-Airshow activities and continue through every day of pre-Airshow and Airshow activities to observe baseline avian behavior and the effects of the Airshow on bird behavior.
- The qualified biological monitor will be present in areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area during the Airshow to monitor bird activity and reactions during the event.
- If nests are found, the qualified biologist shall establish a 300-foot buffer for CEQA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area shall not be entered.
- Trash and debris in the vicinity of nest sites or other sensitive habitats shall be removed by or at the discretion of the qualified biologist.
- During the 2023 Airshow, no noticeable change in avian behavior was observed and no California least tern or western snowy plover were observed. If a noticeable change in behavior (i.e., flushing or flying off) by state and/or federally listed species (e.g., western snowy plover, California least tern, and/or Belding's savannah sparrow) is observed by the biological monitor resulting from flyovers during future Airshows, the monitor will consult with the City and the Applicant to propose an increase in flight elevation, recognizing that the FAA, flight controllers, and the pilots ultimately determine flight elevations.
- Following the conclusion of the annual Airshow, the biological monitor will prepare a post-Airshow report to: (1) document observations, including reporting any relevant information to the CNDDB website and/or CDFW's Vegetation Classification and Mapping Program (although the focus of the monitoring efforts is on avian species); (2) identify measures that were taken, as needed, to avoid potential impacts to nesting or sensitive species; and (3) provide recommendations for future Airshows. The report will be made available to the public on the City's website.

To ensure enforceability of the biological monitoring efforts, this Project Description Feature-1 will be voluntarily included in the Project's Mitigation Monitoring and Reporting Program (MMRP). In summary, the following will occur to ensure that potential impacts to nesting birds remain less than significant:

- Pre-airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and the western snowy plover and well beyond the end of the identified nesting season for the light-footed Ridgway's rail and general avian species.
- Monitoring efforts will be conducted before and during the Airshow to survey for nests and provide measures to avoid potential impacts.
- Daily briefings have and will continue to occur, although the outcome of those briefings cannot be guaranteed.

Section 2.6.6, Access, Ingress/Egress, Road Closures, and Parking

Pages 2-13 and 2-14

2.6.6 Vehicular Access, Ingress/Egress, Road Closures, ~~and~~ Parking, and Public Access

The primary vehicular travel corridors to access the Show Center Area are from Interstate 405 (I-405) to either Beach Boulevard, Magnolia Street, Brookhurst Street, or Goldenwest Street; State Route 55 (SR-55) to Pacific Coast Highway; or Seal Beach Boulevard to Pacific Coast Highway. Based on previous Airshows, temporary changes to vehicular ingress and egress of the Airshow area are anticipated to result from the following restrictions: establishment of a staging area for emergency response personnel between the 200-300 block of southbound 1st Street; installation of staging equipment for the Airshow on Main Street between Walnut Avenue and Pacific Coast Highway; and temporary use of an auxiliary lane to facilitate exiting vehicles from the public parking lots on southbound Pacific Coast Highway approximately 300 feet before the intersection at Beach Boulevard. Future Airshows do not propose substantial or permanent changes to the existing circulation elements, or temporary road closures, which would affect transit vehicles, automobiles, bicycles, or pedestrians beyond what has occurred for historic Airshows.

Patrons arriving by vehicle are permitted to park within the Huntington Beach public parking areas, where the Applicant coordinates with the City to reserve parking spaces dedicated to Airshow attendees. Access to the public parking lots adjacent to the Show Center Area are located along Pacific Coast Highway at the intersection of 6th Street, 1st Street, Huntington Street, Beach Boulevard, and a right-in-right out driveway mid-block between Main Street and 1st Street. Additional public parking southeast of the Show Center Area can be accessed at Newland Street, Magnolia Street, and Brookhurst Street. On-street parking in the general vicinity is allowed except where the temporary restrictions are implemented along Pacific Coast Highway, along with other streets with temporary closures as described above. The Applicant encourages the use of ride share, provides ride share pick up/drop off locations, and provides bicycle valet services as part of the Airshow. ~~The Applicant and City could implement future event shuttle programs that would allow attendees to park at designated public locations and ride a free shuttle to the Show Center Area.~~ It is anticipated the City would close the parking entrance located at Huntington Street and Pacific Coast Highway for the Airshow's exclusive use during event staging of

equipment, set up, production on event days, and event breakdown. The Airshow typically utilizes approximately 500 parking spaces beginning with the first day of setup and the last day of tear down. The 500 parking spaces represents approximately 8 percent of the total available public access parking within Huntington City Beach and Huntington State Beach, including over 6,500 available parking spaces in the Project vicinity. The RV camping lot at this location would be reserved for curation and sale of the Airshow's RV Camping Experience with camping check-in offered on the day prior to the start of the Airshow check-out the Monday following the Airshow. ~~The Airshow would also have 15 RV camping spaces reserved for production use and set up beginning prior to the start of the Airshow up to the Friday following the end of the Airshow.~~ All other details regarding parking will be governed by a future agreement between the City and the Applicant.

During the Airshow and multi-day music festival, and only during event operations and music festival hours, public access would be limited to ticketed holders within the defined areas through the use of fencing and Airshow personnel and security. To ensure public safety during the event's set up and tear down phases, certain beach areas will have restricted access due to high-risk activities, including the use of heavy machinery, sharp objects, trip hazards, and other potential dangers to the public. Some areas, particularly those near the flight high-risk zones, may be closed off for public safety. These zones are typically marked, and access is restricted to ensure that no pedestrians enter dangerous areas during the Airshow performances and nighttime flyovers during the multi-day music festival. However, public beach areas located beyond the Show Center Area will be open to unrestricted public access for both spectators and beachgoers, as well as boaters within the Pacific Ocean located beyond the Airshow Performance Area. While the Airshow is hosted over Huntington City Beach, the event does not close off the entire beach. In fact, only approximately 8 percent of the available sandy beach space along the entire Huntington Beach coastline is occupied by the ticketed areas and all other areas of the sandy beach, including substantially all of the other public spaces, are free to view spaces.

Section 2.7, Review and Approvals

Page 2-15

The Airshow is anticipated to require the following review and approval by the City of Huntington Beach as the Lead Agency under CEQA and the California State Lands Commission as a Responsible Agency under CEQA:

- Certification of the Final Environmental Impact Report.
- Issuance of a Coastal Development Permit (CDP) from the California Coastal Commission (CCC).
- Approval of a State Lands Lease(s) and/or Lease Amendment from the California State Lands Commission.
- Approval of the Specific Event Permit Application.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures

Section 3.2, Biological Resources

3.2.5.1 Special-Status Species

Page 3.2-40

Above ground, flights associated with the Airshow could result in bird strikes. According to a 2006 study, the majority of bird strikes (74 percent) occur within 500 feet above ground level (Dolbeer 2006). In addition, the FAA reported that 70 percent of bird strikes from 1990 to 2022 occurred at 500 feet above ground level (FAA 2023). The majority of the flights planned for the Airshow are expected to fly 500 to 1,000 feet above mean sea level (MSL) and would only occur during the Airshow hours (historically between 10:00 AM and 5:00 PM) and at nighttime, when bird activity is lower. As discussed above, numerous daily flights by commercial and private aircraft currently fly over the BCER and helicopters regularly land at a helipad located within the BCER next to the tidal inlet. Although the Applicant would provide daily formal briefings each day of the Airshow to all pilots about the sensitivity of BCER and would request avoidance of overflights over the area, the Project could increase the amount of air traffic that occurs over the Bolsa Chica ~~Creek~~ Ecological Reserve. ~~Because pilots could be instructed by the FAA to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year as part of the Project, at least one day prior to the Airshow as well as during the operation of the Airshow to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into sensitive ecological areas.~~ Because pilots could be instructed by the Air Traffic Control (ATC) to fly over the BCER, preactivity surveys and biological monitoring will be conducted each year to determine whether Airshow activity is impacting bird behavior and to ensure that no Airshow-related debris drifts into the sensitive ecological areas. The specific monitoring efforts will include the following:

- A qualified biologist (familiar with nesting shorebirds and possessing all necessary permits) will conduct a preactivity survey of the areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area. These surveys will occur one day before any pre-Airshow activities and continue through every day of pre-Airshow and Airshow activities to observe baseline avian behavior and the effects of the Airshow on bird behavior.
- The qualified biological monitor will be present in areas with documented sensitive biological resources, including the BCER, areas known to support historic or existing state and/or federally listed species, such as the western snowy plover and California least tern, and the Show Center Area during the Airshow to monitor bird activity and reactions during the event.
- If nests are found, the qualified biologist shall establish a 300-foot buffer for CEQA- or ESA-listed species and a 500-foot buffer for Fully Protected species. The buffer shall be between the Airshow activities, including presence of spectators, and the nest site. The buffer shall be delineated with construction fence, and signs shall be posted along the fence informing the public of the sensitive nature of the nesting site and indicating the area shall not be entered.

- Trash and debris in the vicinity of nest sites or other sensitive habitats shall be removed by or at the discretion of the qualified biologist.
- During the 2023 Airshow, no noticeable change in avian behavior was observed and no California least tern or western snowy plover were observed. If a noticeable change in behavior (i.e., flushing or flying off) by state and/or federally listed species (e.g., western snowy plover, California least tern, and/or Belding's savannah sparrow) is observed by the biological monitor resulting from flyovers during future Airshows, the monitor will consult with the City and the Applicant to propose an increase in flight elevation, recognizing that the FAA, flight controllers, and the pilots ultimately determine flight elevations.
- Following the conclusion of the annual Airshow, the biological monitor will prepare a post-Airshow report to: (1) document observations, including reporting any relevant information to the CNDDB website and/or CDFW's Vegetation Classification and Mapping Program (although the focus of the monitoring efforts is on avian species); (2) identify measures that were taken, as needed, to avoid potential impacts to nesting or sensitive species; and (3) provide recommendations for future Airshows. The report will be made available to the public on the City's website.

3.2.5.2 Migratory Wildlife Corridors

Page 3.2-42

The Project may temporarily impact wildlife movement within the BSA as a result of aircraft flyovers. This increased presence could disrupt local movement and displace wildlife within the BSA. Natural reserves and open space areas including BCER and the Huntington Beach Wetlands found to the north and south of the Show Center Area offer refuge for displaced wildlife utilizing upland habitats can disperse to other upland areas in the vicinity, and the temporarily impacted areas would not significantly inhibit local or regional movement of wildlife within these avoided areas of the BSA. Wildlife that is more sensitive to human disturbances and noise may be deterred by the Project related activities. The BCER is an important area in the Pacific Flyway for migratory birds species which are protected under the Migratory Bird Treaty Act of 1918 (MBTA, 16.U.S.C 703–712). The BCER is also under the protection of California Fish and Wildlife Code Section 630(17) of Title 14 (CDFW 2023c), which states that "no aircraft operations are permitted in a reserve, and low flyovers are in violation." Sound pollution and repeated overhead flyovers can pose a threat to wildlife or harass wildlife species when they occur directly over an occupied area causing bird populations to take flight each time a plane or low flying aircraft fly over. While the proposed flight path to the Airshow Performance Area is planned to occur 500 to 1,000 feet west of the BCER, over the Pacific Ocean, a helicopter landing/runway display would occur on a temporary aircraft landing pad to be located within the Show Center Area during the hours of the Airshow. The Airshow Performance Area and the Show Center Area are located approximately 2.5 miles south of the BCER with performances scheduled to occur over the Pacific Ocean. Therefore, performances and flyovers will not take place directly over BCER. Also, during the Airshow, planes are expected to fly between 500 to 1,000 feet above MSL (as previously stated, most strikes occur below 500 feet) within the flight path to and from the Show Center Area. Aircraft would be instructed to avoid flying over BCER. A majority of the flights planned for the Airshow would occur 1,000 feet above MSL and would only occur during the Airshow hours (between 10:00 AM and 5:00 PM). Additionally, the

operator will provide daily formal briefings each day of the Airshow to all operators on the sensitivity of BCER and request avoidance of overflights over the area. Because there is a chance that pilots could be ~~planes are~~ instructed by the ATC to fly over BCER, each year, preactivity surveys and biological monitoring will be conducted as part of the Project, at least one day prior to the pre-Airshow activities and during the operation of the Airshow to confirm if Airshow activity is impacting bird behavior, as well as watching that no Airshow-related debris drifts into sensitive ecological areas. The specific elements of the biological monitoring efforts are described under Section 3.2.5.1, *Special-Status Birds*. Thus, it is not anticipated that the Project will result in temporary indirect impacts to BCER.

Appendices

Appendix E, Aviation Noise Technical Report (December 2023)

The most recent Noise Monitoring Technical Report dated December 2023, which contains the measurement data collected during the 2023 Airshow, was inadvertently omitted from Appendix E, of the Draft EIR. A previous version of the Noise Monitoring Technical Report dated September 2023 was included in the Draft EIR. While Table 1 in Appendix E from the September 2023 Noise Monitoring Technical Report presents modeled noise levels for individual aircraft, it does not reflect the full scope of observed conditions that were collected during the 2023 Airshow and were included in the analysis provided in Section 3.4 of the Draft EIR. To address this, the Noise Monitoring Technical Report dated December 2023, including all raw measurement data collected during the 2023 event, has been included and attached to the end of this Chapter. The previous version of the Noise Monitoring Technical Report dated September 2023 has been deleted. The replacement of the most recent Noise Monitoring Technical Report does not alter the analysis or conclusions of the Draft EIR.

4.2 Staff Initiated Text Changes

Chapter 2, Project Description

Section 2.6.5, Show Center Area Layout and Event Viewing

Page 2-13

The Pier Seating Area (Area B) includes temporary seats for purchase and includes umbrellas, cocktail tables and two cash bars. All Pier Seating is landward of the State Lands Commission mean high tide line. ~~Public access (for non-ticket holders) to the Pier would remain open during future Airshows. Only a portion of the~~ The Pier would be reserved for seated ticketholders and ~~pier ingress and egress would still be provided~~ and would be open to the public before and after the event times each day. A 15-foot wide area would be provided and kept clear along the length of the pier for emergency vehicle access during event times each day. The Show Center Control Area located within the center of the Main Hospitality Area (Area D) includes the elevated show control and broadcast room, production and sound tents, and a public safety station. Following each future Airshow, the Show Center Area would be restored to pre-Project conditions.

Section 2.6.7, Airshow Set Up and Site Breakdown

Page 2-14

The Airshow set up would be limited to the Show Center Area. Set up of event facilities (i.e., tented pavilions, cabanas, tents, booths, tables, chairs, restroom trailers, portable bathrooms, barricades, runways, walkways, mobile security light towers, nighttime lighting for the potential music festival, speakers, and trash receptacles/dumpsters) is anticipated to begin up to two weeks prior to the start of the Airshow with a typical day of set up beginning at 6:00 AM and ending by 8:00 PM. All lighting would be low lumens, shielded, and directed away from the ocean to avoid impacts to marine life. In addition, the lifeguard towers within the Show Center Area would be temporarily relocated to other nearby areas of the beach by the City's Public Works Department. The relocation of the lifeguard towers would ensure there are clear lines of sight for Airshow operations staff in the Airshow Command Center and that the parachute landing zone would be cleared of any hazards or physical obstructions. Further, the Applicant would place 16 to 20 buoys offshore to properly designate the aerobatic box which must be clearly visible from the air per FAA and Department of Defense (DOD) regulations. The buoys would be large white inflatable buoys made from marine vinyl approximately 10' x 10' x 10' in dimension. The buoys would be anchored to the sand-bottom sea floor (i.e., similar to how small vessels would anchor) using a 13-pound Danforth anchor with 10-foot chain with the required length of rope for the approximate 40-foot depth of ocean and sandy bottom. The buoys would be individually marked with strobe lights such that they could be clearly seen at night by vessels navigating the ocean. The buoys would be deployed and lowered in the ocean by the City's Marine Safety Division using a combination of lifeguard boats and personal watercraft to ensure proper placement and functionality and to manage throughout the Airshow.

Site breakdown would involve removal of all equipment and temporary facilities. Required equipment would include rubber-tired loaders, forklifts, pick-up trucks with trailers, 4-wheel drive all-terrain carts, and construction light towers. All materials, trash, and debris would be removed from the beach and disposed of off-site daily and at the conclusion of the Airshow. Site breakdown would begin on the final event day (Sunday) following the end of the Airshow from 5:00 PM through 12:00 AM and would continue on the Monday through Friday, from 6:00 AM to 8:00 PM, each day following the Airshow until completed. All lifeguard towers would be reinstated by the City's Public Works Department to their original locations prior to the Airshow. Further, the buoys would be retrieved by the City's Marine Safety Division using a combination of lifeguard boats and personal watercraft following the conclusion of the Airshow.

Section 2.6.8, Event Security

Page 2-14

The City of Huntington Beach Police Department (HBPD) would serve as the lead public safety agency for the Airshow. The HBPD would serve as a conduit to coordinate significant mutual aid and planning efforts with other public safety agencies including, but not limited to, the Federal Bureau of Investigation (FBI), Homeland Security, Orange County Intelligence Assessment Center (OCIAC), the Orange County Sheriff Department, U.S. Coast Guard, the FAA, and TRACON. In addition to foot and motor patrols provided by the ~~City of Huntington Beach Police~~

~~Department (~~HBPD~~)~~ during the event days, private security would also be provided by the Applicant. The private security company would coordinate crowd control, internal security, venue safety, and emergency evacuation in coordination with the HBPD. Compulsory bag and container checks would be required to ensure that no attendees bring in prohibited items onto the Huntington Beach Pier or into the ticketed venue areas for the duration of each Airshow day. In addition, HBPD motor officers and parking control officers would be deployed to maintain traffic flow along Pacific Coast Highway and to enforce parking restrictions in the vicinity. Fire and medical services would be provided by the Huntington Beach Fire Department (HBFD). Located throughout the venue are emergency vehicle staging areas and access lanes, first aid stations, and lost and found stations. Access lanes throughout the Show Center Area would be restricted for emergency vehicles and personnel throughout the Airshow.

Section 2.6.9, Utilities

Page 2-14

Trash/waste (i.e., general waste/trash, recycling waste, food waste, restroom waste), water, and wastewater are the responsibility of the Applicant to work directly with the City for coordination and execution. Each year of the Airshow, the Applicant would prepare a Pollution Protection Plan as a condition of the annual Specific Event Permit for review and approval by the City. Consistent with the City's franchise agreement, the Applicant would contract and coordinate refuse needs with the City's waste management provider, Republic Services. Republic Services would provide cardboard general waste and recycling bins with lids to be located throughout the Show Center Area including the reserved parking lot areas and would place dumpster bins in accordance with expected attendance. Dedicated food waste bins would be placed in the hospitality areas throughout the venue. The Applicant would be responsible to replace all full trash can liners throughout the venue and to place the trash from the bins into the dumpsters to then be removed by Republic Services following the conclusion of the Airshow. The Applicant would encourage all food vendors to avoid plastics (straws, cups, lids) and recommended to use paper straws or straw less lids. For non-potable water demand, the Applicant would use a water coupler to access the irrigation in the planters in the City's parking lots for the Airshow's parking lot activation activities. For potable water, the Applicant would bring in their own water tank and utilize it for filling the wave pool comprised of approximately 10,000 gallons, luxury restroom trailers, washing stations, and catering. The water tank would be filled using the City's hydrants. Alternatively, through an agreement with the Utilities Division in the Public Works Department of the City, a water meter could be installed on the hydrants in the City's parking lots to allow the Airshow to connect directly into the hydrant for potable water to fill the Applicant's water tank and to pay the event's water bill according to Airshow usage on the meter. Restrooms available for the Airshow would consist of the existing restrooms, over one-hundred (100) portable and ADA compliant bathrooms, and several restroom trailers located throughout the venue. All restroom facilities would be cleaned and serviced at the conclusion of the Airshow each day. Each of the single portable restrooms would sit in a containment tray on top of plywood (or other suitable flooring) and would not be within 50 feet of an existing storm drain. Wastewater generated from the Airshow would be hauled off by the Applicant's vendors (i.e., portable bathrooms and restroom trailers). Propane would be used for cooking and heating. Electrical power connections to the City's electric grid would be provided throughout the venue.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures

Section 3.3.5, Impact Analysis

3.3.5.1 Wildlife Hazard Analysis

Page 3.3-11

Impact 3.3-1: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not result in a safety hazard or excessive noise for people residing or working in the project area.

As previously mentioned in Section 3.3.5, most bird strike incidents occur during March through April and August through November when seasonal migration typically occurs. While birds are more likely to be struck during the day due to increased civil aircraft flight during the day (FAA 2023), seasonal migration is generally nocturnal. Airshow flights have historically occurred mid-day (between 10:00 AM and 5:00 PM.) which is when the majority of flights would occur. Therefore, because a majority of ~~no~~ flights related to the Airshow are not planned to occur at night, the potential for impacts to aircraft from collisions with migratory birds are expected to be less than significant.

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Appendix E
Aviation Noise Technical Report

PACIFIC AIRSHOW HUNTINGTON BEACH

Aviation Noise Monitoring Technical Report

December 2023

ESA

PACIFIC AIRSHOW HUNTINGTON BEACH

Aviation Noise Monitoring Technical Report

December 2023

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OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

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1 Introduction

The Pacific Airshow (Airshow) is an existing airshow performance comprised of civilian and military aircraft flybys and aerial acrobatics. Historically, the Airshow has attracted an estimate of up to hundred thousands of attendees. The Airshow is held annually for three (3) days during the fall season since 2016, generally between 7th Street and Beach Boulevard (SR-39) in the City of Huntington Beach (City), California, except in 2020 during the COVID-19 pandemic. During the 2021 Airshow, an unrelated oil spill from a pipeline leak off the Orange County coast resulted in the cancelation of the final day to allow for cleanup efforts. In 2023, the Airshow took place from September 29 to October 1.

In response, ESA is assisting the City with developing a noise analysis to evaluate and document potential noise exposure related to the 2023 Airshow. This analysis is focused on attended noise monitoring that took place during the Airshow to determine potential effects within the City due to performing aircraft. This technical report provides a foundation intended to facilitate conversations between the City and its surrounding neighborhoods related to the contributions of the aircraft operations to the local noise environment during the airshow. It provides an overview of the fundamentals of noise, noise monitoring sites, noise monitoring protocols, and monitoring results.

2 Fundamentals of Noise

This section presents fundamental terminology and noise metrics most commonly used to quantify noise. Noise metrics can be categorized into two primary types: (1) those describing isolated noise events, referred to as single-event metrics, and (2) metrics that gauge the overall noise exposure over a specified duration, referred to as cumulative noise metrics. Single-event metrics provide insights into the intrusiveness, loudness, or overall disturbance caused by individual aircraft or helicopter noises while cumulative metrics serve as indicators of community annoyance.

Environmental Noise Fundamentals

The measurement and human perception of sound involve two basic physical characteristics: intensity and frequency. Intensity is a measure of the acoustic energy of sound vibrations, expressed in terms of sound pressure. The higher the sound pressure, the more energy carried by the sound and the louder the perception of that sound. The second important physical characteristic is sound frequency, which is the number of times per second the air vibrates or oscillates. Low-frequency sounds are characterized as rumbles or roars, while high-frequency sounds are typified by sirens or screeches.

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level), which is measured in decibels (dB). On this scale, zero dB corresponds roughly to the threshold of human hearing and 120 to 140 dB corresponds to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound. Noise is commonly defined as unwanted sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequencies

spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts on humans, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency weighting and is typically applied to community noise measurements.

General Characteristics of Aircraft Noise

Outdoor sound levels decrease as a function of distance from the source and as a result of wave divergence, atmospheric absorption, and ground attenuation. If sound is radiated from a source in a homogenous and undisturbed manner, the sound travels as spherical waves. As the sound wave travels away from the source, the sound energy is distributed over a greater area, dispersing the sound power of the wave. Spherical spreading of the sound wave reduces the noise level, for most sound sources, at a rate of 6 dB per doubling of the distance.

Atmospheric absorption also influences the levels that are received by the observer. The greater the distance sound travels, the greater the influence of atmospheric effects. Atmospheric absorption becomes important at distances of greater than 1,000 feet. The degree of absorption is a function of the sound frequency, as well as the humidity and temperature of the air. For example, atmospheric absorption is lowest at high humidity and higher temperatures. Turbulence and gradients of wind, temperature, and humidity also play a significant role in determining the degree of attenuation. Certain conditions, such as inversions, can also result in higher sound levels that would result from spherical spreading as a result of channeling or focusing the sound waves.

Absorption effects in the atmosphere vary with frequency. The higher frequencies are more readily absorbed than the lower frequencies. Over large distances, the lower frequencies become the dominant sound as the higher frequencies are attenuated.

The effects of ground attenuation on aircraft noise propagation are a function of the height of the source and/or receiver and the characteristics of the terrain. The closer the source of the noise is to the ground, the greater the ground absorption. Terrain consisting of soft surfaces, such as vegetation, provides for more ground absorption than hard surfaces, such as a large parking lot.

Aircraft noise originates from both the engines and the airframe of an aircraft, but the engines are, by far, the more significant source of noise. Meteorological conditions affect the transmission of aircraft noise through the air. Wind speed and direction, and the temperature immediately above ground level, cause diffraction and displacement of sound waves. Humidity and temperature materially affect the transmission of air-to-ground sound through absorption associated with the instability and viscosity of the air.

Aircraft Noise Descriptors

The description, analysis, and reporting of aircraft noise levels is made difficult by the complexity of human response to sound and the myriad of sound-rating scales and metrics that have been

developed for describing acoustic effects. Various rating scales have been devised to approximate the human response to the "loudness" or "noisiness" of a sound. Noise metrics have been developed to account for additional parameters, such as duration and cumulative effect of multiple events.

Noise metrics can be categorized as single-event metrics and cumulative metrics. Single-event metrics describe the noise from individual events, such as an aircraft flyover. Cumulative metrics describe the noise in terms of the total noise exposure over a period of time.

A-Weighted Sound Pressure Level (dBA)

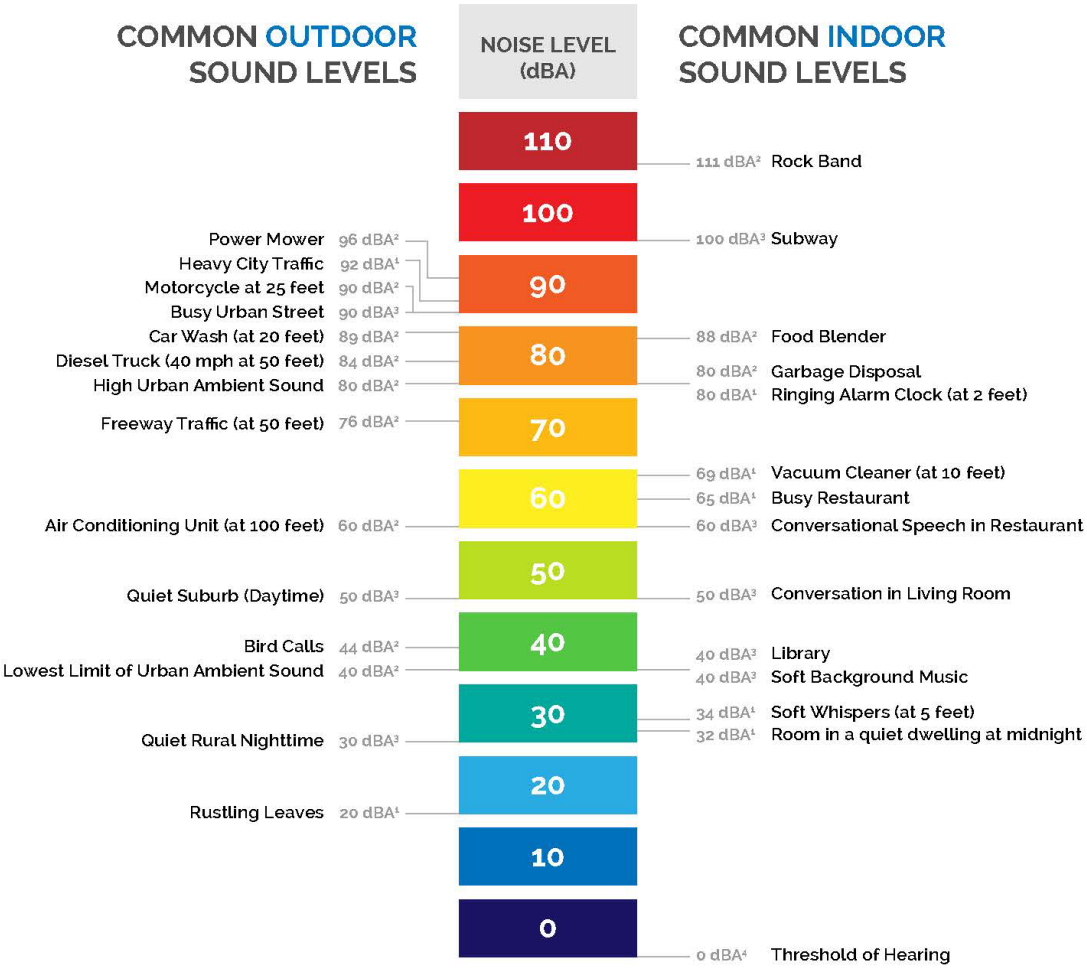
The decibel is a unit used to describe sound pressure level. When expressed in dBA, the sound has been filtered to reduce the effect of very low and very high frequency sounds, much as the human ear filters sound frequencies. Without this filtering, calculated and measured sound levels would include events that the human ear cannot hear (e.g., dog whistles and low frequency sounds, such as the groaning sounds emanating from large buildings with changes in temperature and wind). With A-weighting, calculations and sound monitoring equipment approximate the sensitivity of the human ear to sounds of different frequencies.

Some common sound levels on the dBA scale are listed in **Figure 1**. As shown, the relative perceived loudness of a sound doubles for each increase of 10 dBA, although a 10-dBA change in the sound level corresponds to a factor of 10 changes in relative sound energy. Generally, single-event sound levels with differences of 2 dBA or less are not perceived to be noticeably different by most listeners.

Maximum A-Weighted Level (Lmax)

Lmax is the maximum, or peak, sound level during a noise event. The metric only accounts for the highest A-weighted sound level measured during a noise event, not for the duration of the event. For example, as an aircraft approaches, the sound of the aircraft begins to rise above ambient levels. The closer the aircraft gets, the louder the sound until the aircraft is at its closest point. As the aircraft passes, the sound level decreases until the sound returns to ambient levels. Some sound level meters measure and record the maximum sound level (Lmax). The Lmax for an aircraft flyover is illustrated on **Table 1**.

Figure 1. Common Sound on the A-Weighted Decibel Scale



1 Aviation Noise Effects, FAA, AEE, March, 1985 (FAA-EE-85-2), Table 1.1
2 Federal Agency Review of Selected Airport Noise Analysis Issues (Federal Interagency Committee on Noise), August 1992, Table B.1
3 Children's health and the environment, A Global Perspective, World Health Organization, 2005, Table 15.1
4 OSHA Technical Manual, TED 01-00-015, Section III (Health Hazards), Chapter 5 (Noise, Updated 8/15/2013)

Source: Environmental Science Associates, 2023.

Table 1. Common Sound on the A-Weight Decibel Scale

Sound	Sound level (dBA)	Relative loudness (approximate)	Relative sound energy
Rock music, with amplifier	120	64	1,000,000
Thunder, snowmobile (operator)	110	32	100,000
Boiler shop, power mower	100	16	10,000
Orchestral crescendo at 25 feet, noisy kitchen	90	8	1,000
Busy street	80	4	100
Interior of department store	70	2	10
Ordinary conversation, 3 feet away	60	1	1
Quiet automobiles at low speed	50	1/2	.1
Average office	40	1/4	.01
City residence	30	1/8	.001
Quiet country residence	20	1/16	.0001
Rustle of leaves	10	1/32	.00001
Threshold of hearing	0	1/64	.000001

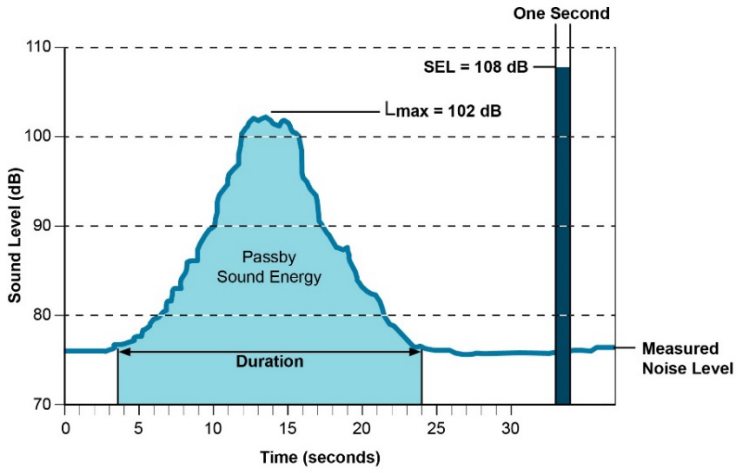
SOURCE: U.S. Department of Housing and Urban Development, Aircraft Noise Impact—Planning Guidelines for Local Agencies, 1972.

Sound Exposure Level (SEL)

Sound Exposure Level (SEL), is a time integrated measure, expressed in decibels, of the sound energy of a single noise event at a reference duration of one second. The sound level is integrated over the period that the level exceeds a threshold. Therefore, SEL accounts for both the maximum sound level and the duration of the sound. The standardization of discrete noise events into a one second duration allows calculation of the cumulative noise exposure of a series of noise events that occur over a period of time. The SEL of an aircraft noise event is typically 6 to 12 dBA greater than the Lmax of the event. SELs for aircraft noise events depend on the location of the aircraft relative to the noise receptor, the type of operation (landing, takeoff, or overflight), and the type of aircraft. The SEL for an aircraft flyover is illustrated in **Figure 2**.

Figure 2. Sound Exposure Level and Maximum Sound Level

SOURCE: ESA



Equivalent A-Weighted Noise Level (Leq)

Leq is the sound level corresponding to a steady state, A-weighted sound level containing the same total energy as a time-varying signal over a given sample period. Leq is the "energy" average noise level during the time period of the sample. It is based on the observation that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. It is the energy sum of all the sound that occurs during that time period. This is graphically illustrated in the middle graph on **Figure 2**. Leq can be measured for any time period, but is typically measured for 15 minutes, 1 hour, or 24 hours.

Leq is also used to represent average daytime and nighttime noise levels. Daytime Leq is the 15-hour average sound level for each one hour between 7 a.m. to 10 p.m. Nighttime Leq is the 9-hour average sound level for each one hour between 10 p.m. to 7 a.m.

Day-Night Average Sound Level (DNL or Ldn)

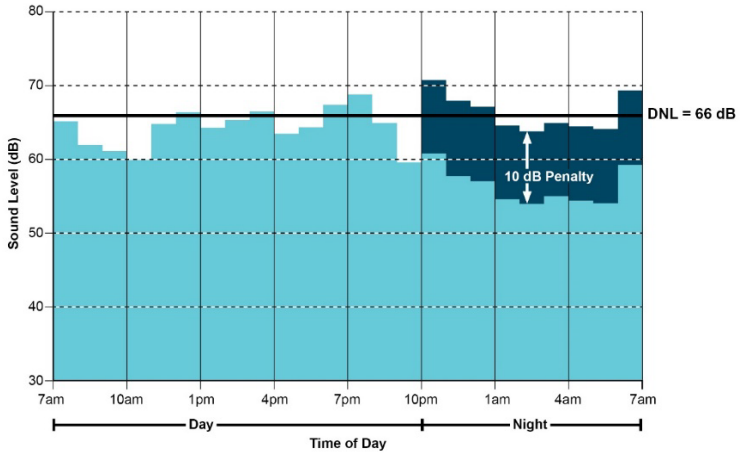
The Day-Night Average Sound Level (DNL or Ldn) represents a 24-hour A-weighted noise dose as presented in **Figure 3**. DNL is essentially equal to the 24-hour A-weighted Leq, with one important adjustment: noise occurring at night – from 10 p.m. through 7 a.m. – is "factored up." The factoring up can be made in one of two ways:

1. Weighting, by counting each nighttime noise contribution 10 times; e.g., if DNL is calculated by summing the SEL of aircraft operations over a 24-hour period, each nighttime operation is represented by 10 identical daytime operations.
2. Penalizing, by adding 10 dB to all nighttime noise contributions; e.g., if DNL is calculated from the SEL of aircraft operations occurring over a 24-hour period, 10 dB are added to the SEL values for nighttime operations.

The 10 dB adjustment accounts for our greater sensitivity to nighttime noise and the fact lower ambient levels at night tend to make noise events, such as aircraft flyovers, more intrusive. **Figure 3** depicts this adjustment graphically.

Figure 3. Example of Day Night Average Sound Level Calculation

SOURCE: ESA



3 Noise Monitoring

The following sections outline the noise monitoring methodology and results. This includes an overview of the noise monitoring locations, description of the noise monitoring equipment utilized and its setup, aircraft overflight event correlation, and noise level results.

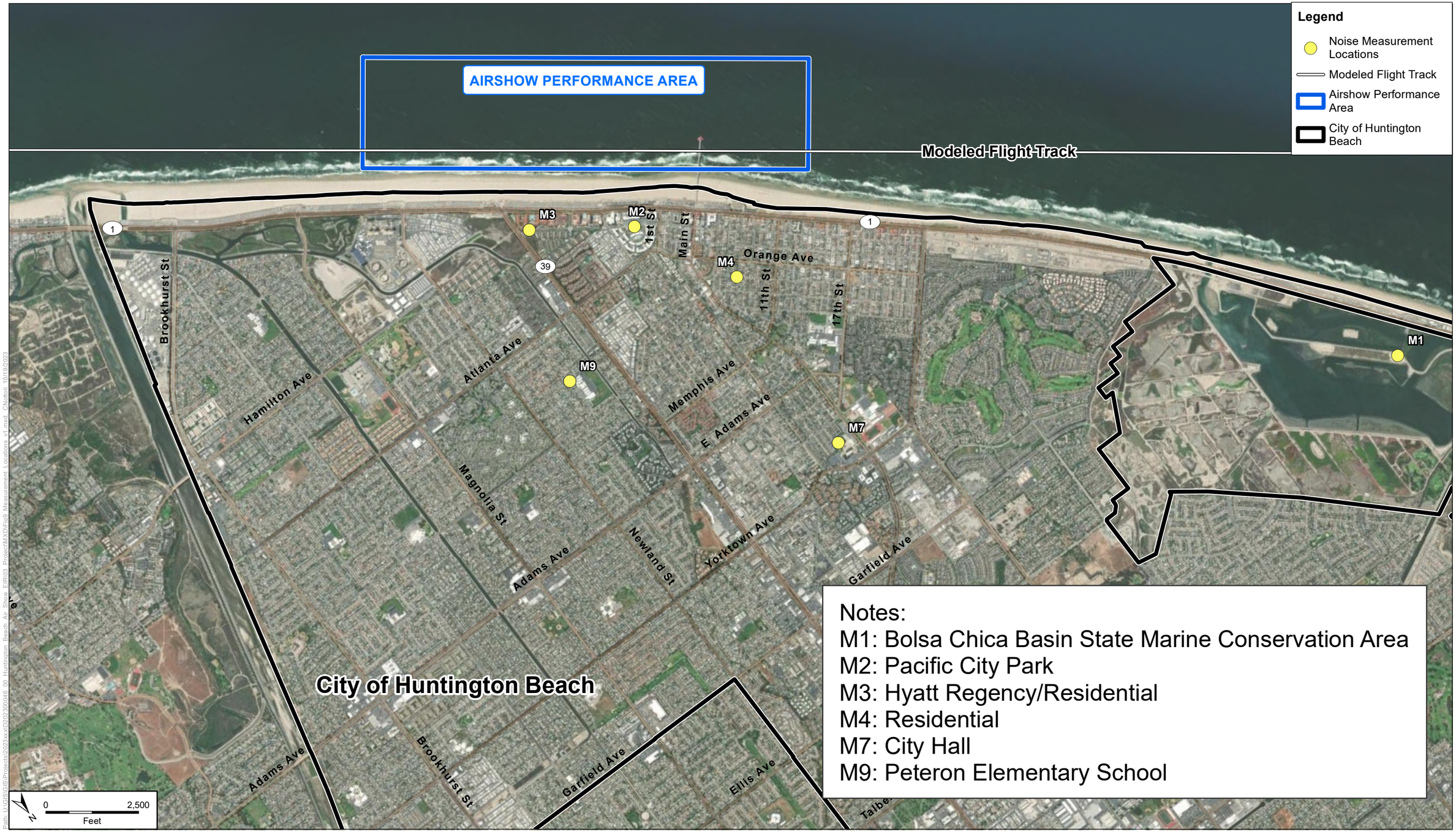
3.1 Methodology

ESA conducted short-term, attended noise monitoring during the 2023 Airshow. Measurement sites were chosen based on proximity of residential, mixed use, municipal, and conservational land uses throughout the City. The site selections are shown in **Figure 4** and photos of each location are found in **Section 3.2 Measurement Sites**.

ESA deployed a Larson Davis Model 831 Sound Level Meter (SLM) at three sites over a two-day period on September 29th and 30th, 2023. All instrumentation conforms to ANSI (American National Standard Institute) Standard S1.4 for Type 1 precision, the highest level of precision, with current calibrations traceable to the U.S. National Institute of Standards and Technology (NIST). Type 1 precision instrumentation requires constant calibration to meet ANSI standards; calibrations were carried out in the field before and after the measurement period using NIST-certified calibration devices. Calibration certificates are found in **Appendix B**.

Continuous one-second Leq measurement data was obtained for the duration of the Airshow. ESA personnel monitored each site and noted aircraft flyovers and any notable community noise events (e.g. police sirens, ambulances, lawn mowing). For the purpose of analyzing the measurement data, each performance was considered a single noise event due to the overlapping noise signatures that resulted from the high frequency of aircraft pass-bys. The measurement data was split into events based on the performance schedule provided to ESA by the City, and each performance was reviewed by ESA. The time-history data in conjunction with the notes taken by observers during the Airshow were used to determine an appropriate noise threshold for each performance. Any noise exceeding the threshold for a given performance was considered to be aircraft noise, and any noise not exceeding the threshold was considered to be ambient or "community" noise. Aircraft SEL and Lmax were then computed based on these parameters.

It is important to note that the noise monitoring results presented in this report should not be compared to noise measurements made using less precise instrumentation, such as cell phone applications. Cellphone microphones do not conform to ANSI or NIST standard for several reasons. (1) the built-in microphones found in cellphones have limitations due to their miniature size and circuit board placement, which affect their dynamic range and signal-to-noise ratio, (2) another constraint of built-in microphones is the lack of access and inability to perform periodic or pre-measurements and (3) the placement of the microphone can affect measured sound levels. (It is imperative that microphones be placed away from trees, walls, and structures as sound reflecting off surfaces will increase the sound levels measured.)



Path: U:\GIS\GIS\Projects\2023xx\D202300046_00 Huntington Beach Air Show EIR\03 Project\MXD\Fig9 Measurement Locations_v1.mxd, CNottoli 10/19/2023

SOURCE: AEDT 3e; ESA, 2023.

PAHB Noise Contour Analysis

Figure 4
Noise Measurement Locations for the 2023 Airshow
Pacific Airshow Huntington Beach

ESA

3.2 Measurement Sites

3.2.1 Site M1 – Bolsa Chica Basin State Marine Conservation Area

Bolsa Chica Basin State Marine Conservation Area Site M1 is located approximately four miles north of Downtown Huntington Beach and directly east of Pacific Coast Highway. Attended measurements were conducted at this site on Friday, September 29th, 2023 for the scheduled duration of the Airshow. Roadway noise was the predominate community noise source observed at this site.





3.2.2 Site M2 – Pacific City Park

Pacific City Park Site M2 is located approximately in Downtown Huntington Beach behind the Pacific City Shopping Center on Pacific View Avenue. Attended measurements were conducted at this site on Saturday, September 30th, 2023, for the scheduled duration of the Airshow. Roadway noise was the predominate community noise source observed at this site.





3.2.3 Site M3 – Hyatt Regency Hotel

Hyatt Regency Hotel Site M3 was located on the corner of Pacific View Avenue and Beach Boulevard. Attended measurements were conducted at this site on Saturday, September 30th, 2023, for the scheduled duration of the Airshow. Roadway noise was the predominate community noise source observed at this site.





3.2.4 Site M4 – Pecan Avenue and 8th Street

Residential Site M4 was located on the corner of Pecan Avenue and 8th Street. Attended measurements were conducted at this site on Saturday, September 30th, 2023, for the scheduled duration of the Airshow. Ambient community noise included roadway, pedestrian, and construction events at this site.





3.2.5 Site M7 – Huntington Beach City Hall

City Hall Site M7 was located in the open area along Park Street on the premise of the municipal buildings. Attended measurements were conducted at this site on Friday, September 29th, 2023, for the scheduled duration of the Airshow. Occasional police sirens were the predominate community noise source observed at this site.





3.2.6 Site M9 – Peterson Elementary School

Site M9 was located on the corner of Farnsworth Lane and Kingfisher Drive, directly south of Peterson Elementary School. Attended measurements were conducted at this site on Friday, September 29th, 2023, for the scheduled duration of the Airshow. Ambient community noise included roadway, pedestrian, and construction events at this site.





3.3 Monitoring Results

The short-term monitoring equipment measured noise levels continuously over the course of the Airshow on September 29th and 30th, 2023. The instruments were programmed to record slow-response broadband A-weighted sound levels in one-second intervals. Ambient noise monitoring results during the Airshow are summarized in on **Table 2**. The ambient noise conditions throughout the City (Sites M1, M4, M7, and M9) range from 51.2 and 52.7 dB. The ambient noise conditions at Sites M2 and M3 at 55.0 dB and 57.8 dB, respectively, are higher because these sites are located along Pacific View Avenue and are influenced by roadway noise.

Table 2. Ambient Noise Levels (dB)

M1	M2	M3	M4	M7	M9
51.7	55.0	57.8	52.7	51.2	51.2

SOURCE: ESA, 2023

Table 3 through **Table 8** present the measured events observed at each site that was logged in the datasheets. Additional details on each flight can be found in the performer schedule in **Appendix C**. As mentioned in Section 2, Lmax is the peak sound level during a noise event while SEL expresses the sound energy of a single noise event over the duration of one (1) second. Therefore, the SEL of a noise event may be 6 to 12 dBA greater than the Lmax of the same noise event.

Table 3 presents the measured events at Site M1, Bolsa Chica Basin State Marine Conservation Area. The loudest Lmax and SEL were associated to the Thunderbirds Diamond Practice at 100.1 and 109.4 dB, respectively. The quietest Lmax event was attributed to the Army Helicopters at 70.8 dB with and associated SEL of 79.3 dB. The quietest SEL event was attributed to the Trump Boeing 757 at 78.2 dB with and associated Lmax of 71.7 dB. The ambient background noise on the day of these events was between 50.1 and 54.0 dB.

Table 3. Site M1 - Measured Events at Bolsa Chica Basin State Marine Conservation Area

Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/29/2023	9:27 AM	Thunderbirds Diamond Practice	54	100.1	109.4
9/29/2023	11:07 AM	USN Growler	23	77.7	88.3
9/29/2023	11:30 AM	Trump B757	7	71.7	78.2
9/29/2023	11:51 AM	Snowbirds	42	76.7	90.4
9/29/2023	12:45 PM	USN F35C	15	79.6	92.3
9/29/2023	1:21 PM	Army Helicopters	6	70.8	79.3
9/29/2023	1:33 PM	Army Golden Knights	11	74.1	80.6
9/29/2023	1:47 PM	USN Growler	12	91.4	96.2
9/29/2023	2:20 PM	USAF Heritage	40	88.7	102.0
9/29/2023	3:36 PM	Thunderbirds	45	94.3	106.4

SOURCE: ESA, 2023

Table 4 presents the measured events at Site M2, Pacific City Park. The loudest Lmax and SEL were associated to the USAF Heritage flight at 112.5 and 124.9 dB, respectively. The quietest Lmax event was attributed to the OC Water Drop at 63.6 dB with and associated SEL of 77.8 dB. The quietest SEL event was attributed to the CA ANG C130 at 74.5 dB with and associated Lmax of 64.0 dB. The ambient background noise on the day of these events was between 51.3 and 57.9 dB.

Table 4. Site M2 – Measured Events at Pacific City Park

Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/30/2023	9:57 AM	F15 Takeoff From SLI	13	85.6	98.7
9/30/2023	10:10 AM	OC Water Drop	4	63.6	77.8
9/30/2023	10:30 AM	USAF F15	4	100.0	111.0
9/30/2023	10:36 AM	Sammy Mason	12	84.8	97.5
9/30/2023	10:49 AM	Ace Maker x2	10	77.3	90.1
9/30/2023	11:02 AM	Subsonex	11	81.3	94.4
9/30/2023	11:14 AM	USN F18 Rhino	13	107.9	117.9
9/30/2023	11:29 AM	CA ANG C130	6	64.0	74.5
9/30/2023	11:35 AM	Lyon Air Museum C47	7	66.1	82.0
9/30/2023	11:44 AM	Snowbirds	30	87.8	99.8
9/30/2023	12:34 PM	USN F35C	15	108.3	119.9
9/30/2023	12:51 PM	Michael Goulian	11	89.1	102.3
9/30/2023	1:03 PM	FedEx B757	8	98.9	105.3
9/30/2023	1:10 PM	USN Growler	10	107.0	119.1
9/30/2023	1:21 PM	Red Bull Helo	13	71.4	88.3
9/30/2023	1:34 PM	USAF F15	3	102.1	109.9
9/30/2023	1:41 PM	USAF KC135	2	73.6	84.4
9/30/2023	3:25 PM	USAF Heritage	42	112.5	124.9

SOURCE: ESA, 2023

Table 5 presents the measured events at Site M3, Hyatt Regency Hotel. The loudest Lmax and SEL were associated to the USAF F22 at 111.0 and 123.4 dB, respectively. The USN Growler also had the loudest Lmax at 111.0 dB with an associated SEL of 117.1 dB, the second loudest SEL at M3. The quietest events, attributed to the OC Water Drop, had an Lmax and SEL of 74.3 and 87.1 dB, respectively. The ambient background noise on the day of these events was between 55.0 and 60.4 dB.

Table 5. Site M3 – Measured Events at Hyatt Regency Hotel

Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/30/2023	9:57 AM	F15 Takeoff From SLI	13	89.8	101.2
9/30/2023	10:10 AM	OC Water Drop	4	74.3	87.1
9/30/2023	10:22 AM	Leap Frogs	8	77.8	91.4
9/30/2023	10:30 AM	USAF F15	4	88.2	99.6
9/30/2023	10:36 AM	Sammy Mason	12	88.0	100.7
9/30/2023	10:49 AM	Ace Maker x2	10	85.9	94.5
9/30/2023	11:02 AM	Subsonex	11	81.5	95.6
9/30/2023	11:14 AM	USN F18 Rhino	13	107.9	114.9
9/30/2023	11:44 AM	Snowbirds	30	98.0	104.6
9/30/2023	12:34 PM	USN F35C	15	107.1	116.1
9/30/2023	12:51 PM	Michael Goulian	11	100.4	102.6
9/30/2023	1:03 PM	FedEx B757	8	91.0	97.7
9/30/2023	1:10 PM	USN Growler	10	111.0	117.1
9/30/2023	1:21 PM	Red Bull Helo	13	84.1	96.0
9/30/2023	1:34 PM	USAF F15	3	98.1	104.8
9/30/2023	1:41 PM	USAF KC135	2	78.7	88.5
9/30/2023	3:25 PM	USAF F22	42	111.0	123.4

SOURCE: ESA, 2023

Table 6 presents the measured events at Site M4, Pecan Avenue and 8th Street. The loudest Lmax and SEL were associated to the USAF Heritage at 119.3 and 124.4 dB, respectively. The quietest Lmax event was attributed to the Subsonex at 73.1 dB with an associated SEL of 86.9 dB. The quietest SEL event was attributed to the USAF KC135 at 83.5 dB with and associated Lmax of 79.9 dB. The ambient background noise on the day of these events was between 50.9 and 57.3 dB.

Table 6. Site M4 – Measured Events at Pecan Avenue and 8th Street

Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/30/2023	9:57 AM	F15 Takeoff From SLI	13	84.9	97.3
9/30/2023	10:30 AM	USAF F15	4	96.9	104.3
9/30/2023	10:36 AM	Sammy Mason	12	75.8	91.7
9/30/2023	10:49 AM	Ace Maker x2	10	76.7	89.7
9/30/2023	11:02 AM	Subsonex	11	73.1	86.9
9/30/2023	11:14 AM	USN F18 Rhino	13	110.7	115.1
9/30/2023	11:44 AM	Snowbirds	30	81.3	93.2
9/30/2023	12:34 PM	USN F35C	15	116.6	120.7
9/30/2023	12:51 PM	Michael Goulian	11	81.6	95.9
9/30/2023	1:03 PM	FedEx B757	8	92.4	99.4
9/30/2023	1:10 PM	USN Growler	10	106.8	115.2
9/30/2023	1:34 PM	USAF F15	3	94.1	102.4
9/30/2023	1:41 PM	USAF KC135	2	79.9	83.5
9/30/2023	3:25 PM	USAF Heritage	42	119.3	124.4

SOURCE: ESA, 2023

Table 7 presents the measured events at Site M4, Huntington Beach City Hall. The loudest Lmax event was attributed to the USN F35C at 112.8 dB with an associated SEL of 118.2 dB. The loudest SEL event was attributed to the USAF Heritage flight at 120.2 dB with an associated Lmax of 111.2 dB. The quietest event, attributed to the USAF KC135, had an Lmax and SEL of 61.6 and 75.3 dB, respectively. The ambient background noise on the day of these events was between 47.8 and 52.8 dB.

Table 7. Site M7 – Measured Events at Huntington Beach City Hall

Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/29/2023	9:27 AM	Thunderbirds Diamond Practice	54	99.7	108.6
9/29/2023	10:32 AM	Sammy Mason	9	78.0	90.2
9/29/2023	10:42 AM	Ace Maker	14	71.4	84.8
9/29/2023	10:58 AM	Subsonex	9	78.7	90.7
9/29/2023	11:07 AM	USN Growler	23	95.5	106.2
9/29/2023	11:51 AM	Snowbirds	42	88.5	102.0
9/29/2023	12:45 PM	USN F35C	15	112.8	118.2
9/29/2023	1:00 PM	Matt and Emma	11	68.6	82.8
9/29/2023	1:12 PM	FedEx B757	7	67.8	79.6
9/29/2023	1:21 PM	Army Helicopters	6	65.8	78.6
9/29/2023	1:47 PM	USN Growler	12	94.3	107.8
9/29/2023	2:12 PM	USAF KC135	6	61.6	75.3
9/29/2023	2:20 PM	USAF Heritage	40	111.2	120.2
9/29/2023	3:11 PM	Michael Goulian	11	68.4	84.8
9/29/2023	3:24 PM	Jet Waco	10	71.0	85.0
9/29/2023	3:36 PM	Thunderbirds	45	94.9	108.2

SOURCE: ESA, 2023

Table 8 presents the measured events at Site M9, B Peterson Elementary School. The loudest Lmax and SEL were associated to the Thunderbirds at 125.1 and 128.5 dB, respectively. The quietest event, attributed to the Army Helicopters, had an Lmax and SEL of 66.5 and 76.1 dB, respectively. The ambient background noise on the day of these events was between 48.4 and 58.1 dB.

Table 8. Site M9 – Measured Events at Peterson Elementary School

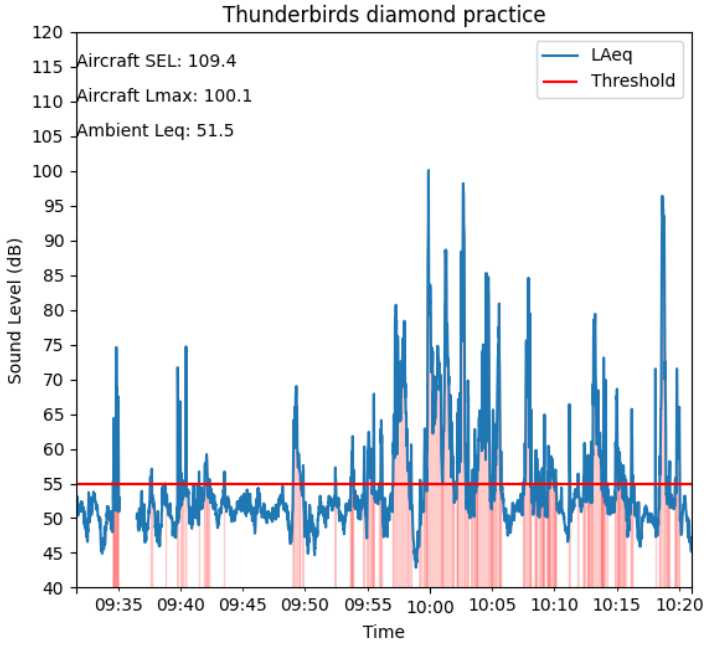
Date	Time	Performer	Duration (Minutes)	Lmax (dB)	SEL (dB)
9/29/2023	9:27 AM	Thunderbirds Diamond Practice	54	119.9	124.0
9/29/2023	10:30 AM	Leap Frogs Flag Jump w USA Anthem	2	71.7	85.4
9/29/2023	10:32 AM	Sammy Mason	9	76.4	87.6
9/29/2023	10:42 AM	Ace Maker	14	83.7	93.1
9/29/2023	10:58 AM	Subsonex	9	86.8	98.0
9/29/2023	11:07 AM	USN Growler	23	107.8	112.9
9/29/2023	11:51 AM	Snowbirds	42	98.8	109.6
9/29/2023	12:45 PM	USN F35C	15	94.0	105.7
9/29/2023	1:00 PM	Matt and Emma	11	78.0	87.9
9/29/2023	1:21 PM	Army Helicopters	6	66.5	76.1
9/29/2023	1:33 PM	Army Golden Knights	11	74.4	88.0
9/29/2023	1:47 PM	USN Growler	12	103.0	113.4
9/29/2023	2:00 PM	Red Bull Helo	7	76.5	86.1
9/29/2023	2:12 PM	USAF KC135	6	81.0	88.4
9/29/2023	2:20 PM	USAF Heritage	40	110.2	120.1
9/29/2023	3:11 PM	Michael Goulian	11	84.2	94.1
9/29/2023	3:24 PM	Jet Waco	10	85.8	95.7
9/29/2023	3:36 PM	Thunderbirds	45	125.1	128.5

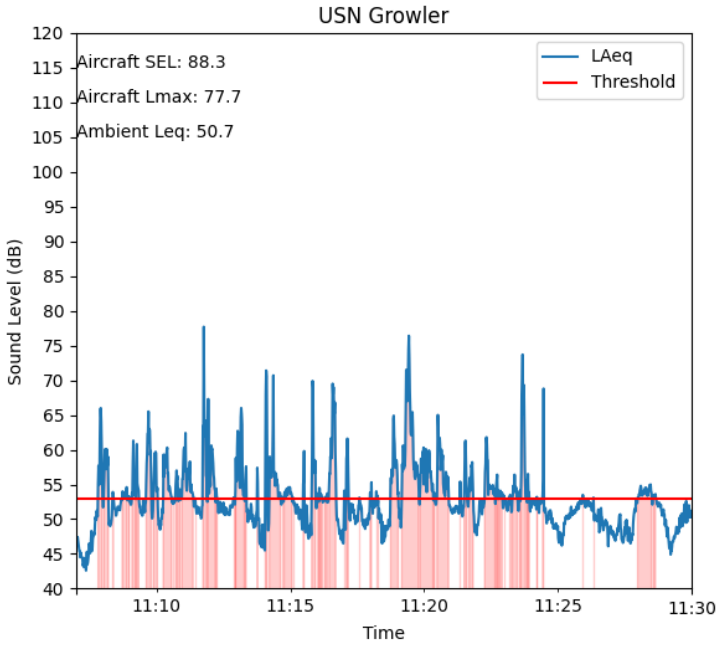
SOURCE: ESA, 2023

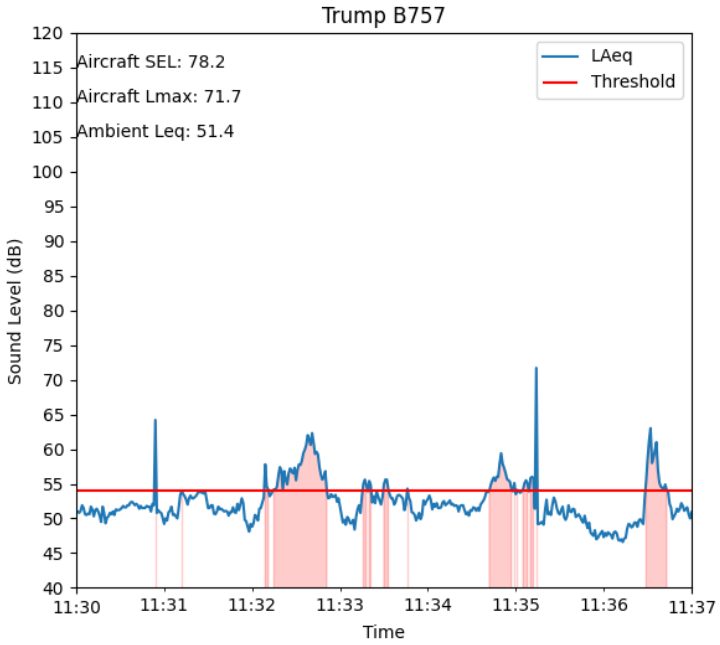
The data shows that the loudest aircraft, regarding Lmax and SEL, across all sites were the Thunderbird, USAF Heritage, and USAF F22. The loudest Lmax recorded ranged from 100.1, which is roughly equivalent to a powered mower and 125.1 dB, equivalent to a rock concert, as shown in **Table 1**. The loudest SELs ranged from 109.4 to 128.5 dB. As shown in **Appendix A**, these events are intermittent due to the nature of each flyby and are not sustained noise levels.

Appendix A –Time History Graphs

Site M1- Bolsa Chica Basin State Marine Conservation Area






Trump B757
Aircraft SEL: 78.2
Aircraft Lmax: 71.7
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:30
11:31
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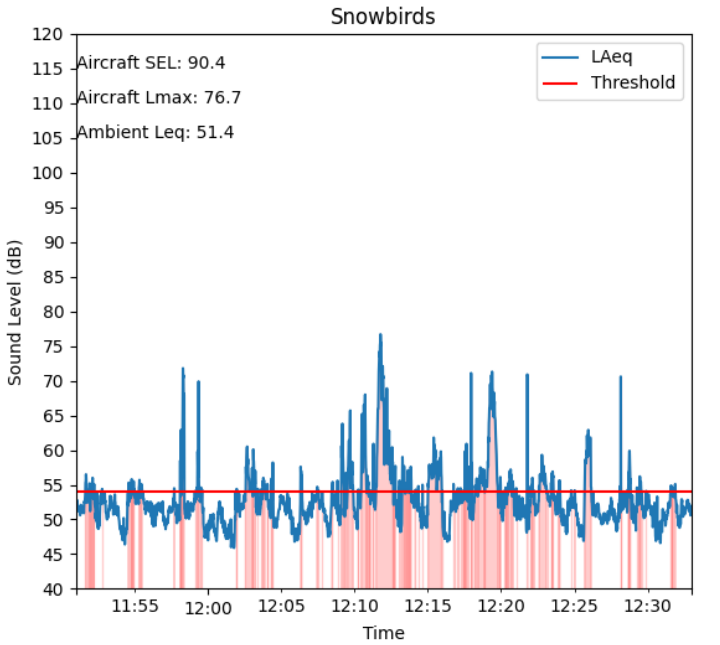
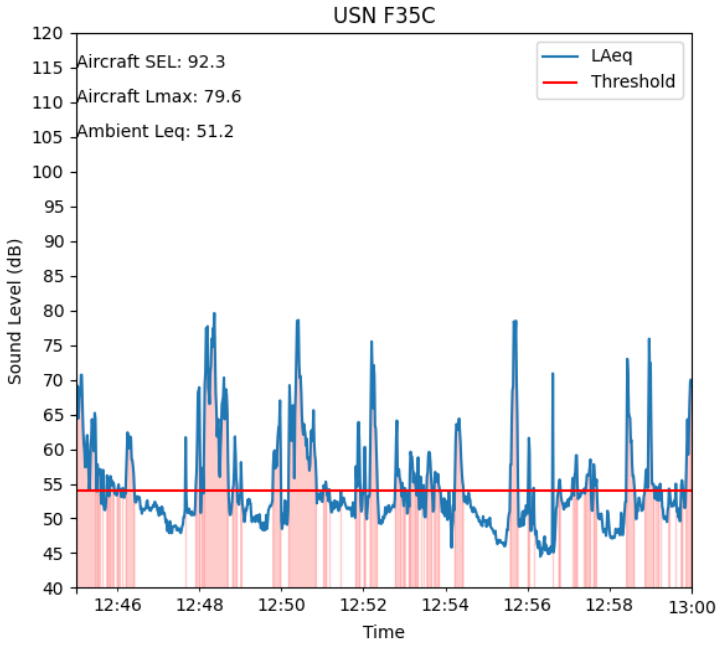
11:33
11:34
11:35
11:36
11:37


Snowbirds
Aircraft SEL: 90.4
Aircraft Lmax: 76.7
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:55
12:00
12:05
12:10
12:15
12:20
12:25
12:30


USN F35C
Aircraft SEL: 92.3
Aircraft Lmax: 79.6
Ambient Leq: 51.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:46
12:48
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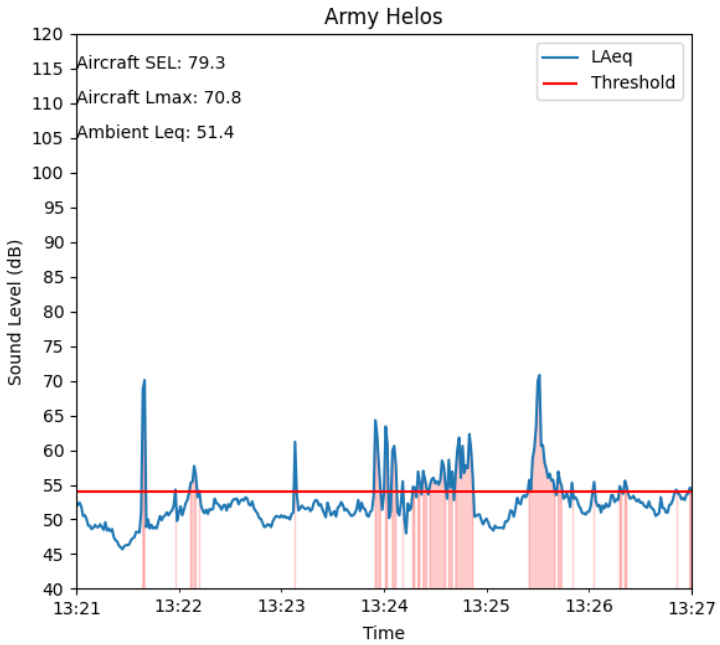
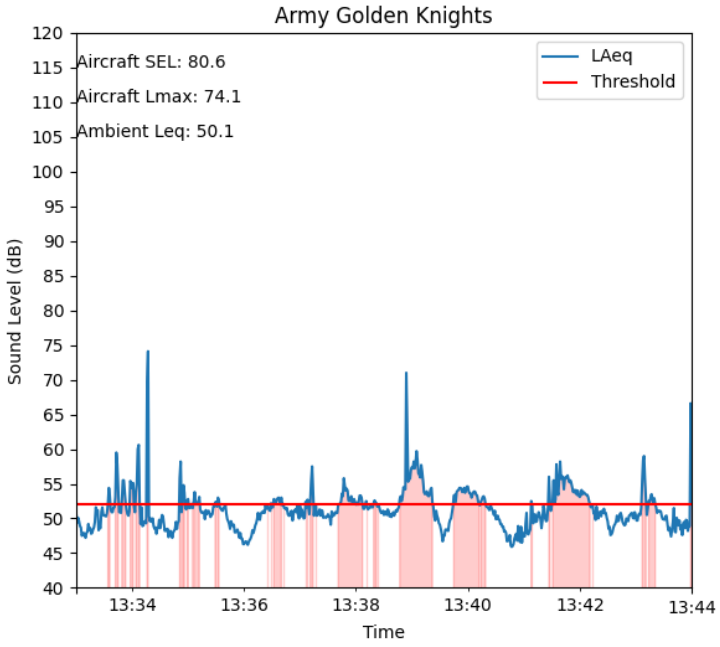
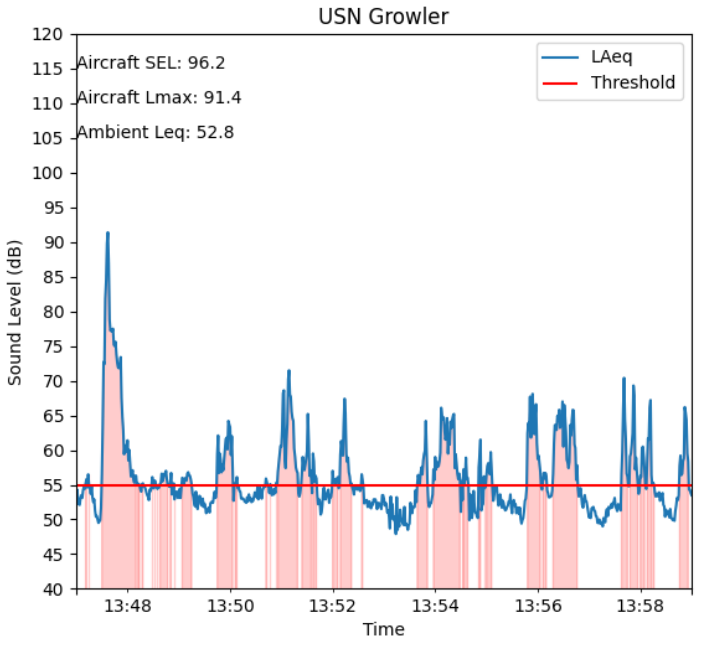
12:52
12:54
12:56
12:58
13:00


Army Helos
Aircraft SEL: 79.3
Aircraft Lmax: 70.8
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:21
13:22
13:23
13:24
13:25
13:26
13:27


Army Golden Knights
Aircraft SEL: 80.6
Aircraft Lmax: 74.1
Ambient Leq: 50.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:34
13:36
13:38
13:40
13:42
13:44


USN Growler
Aircraft SEL: 96.2
Aircraft Lmax: 91.4
Ambient Leq: 52.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:48
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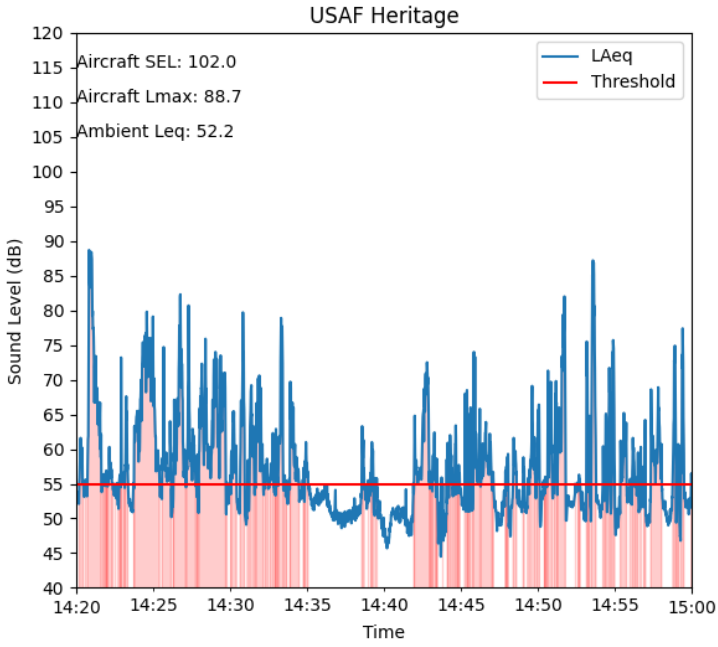
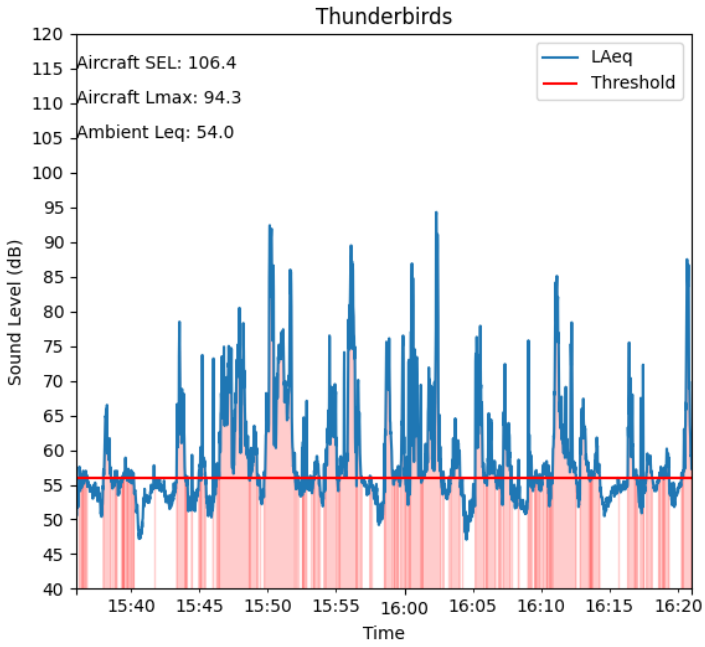
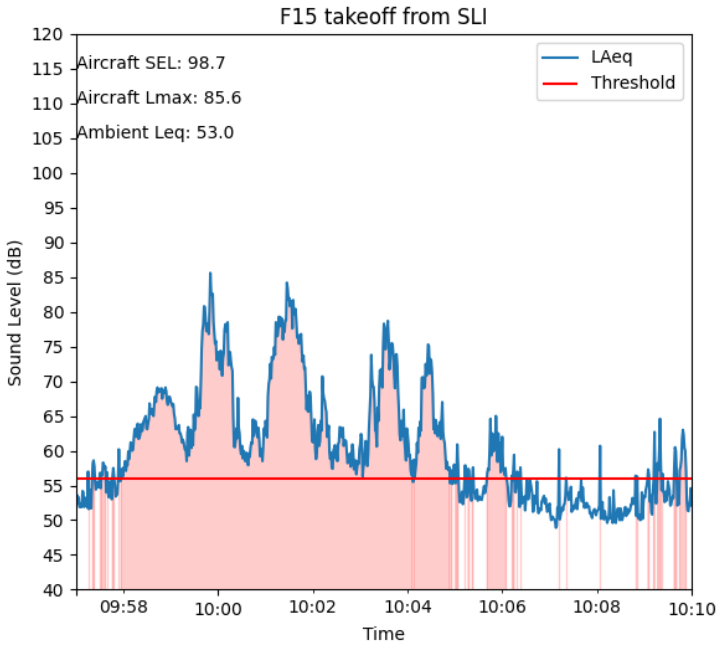
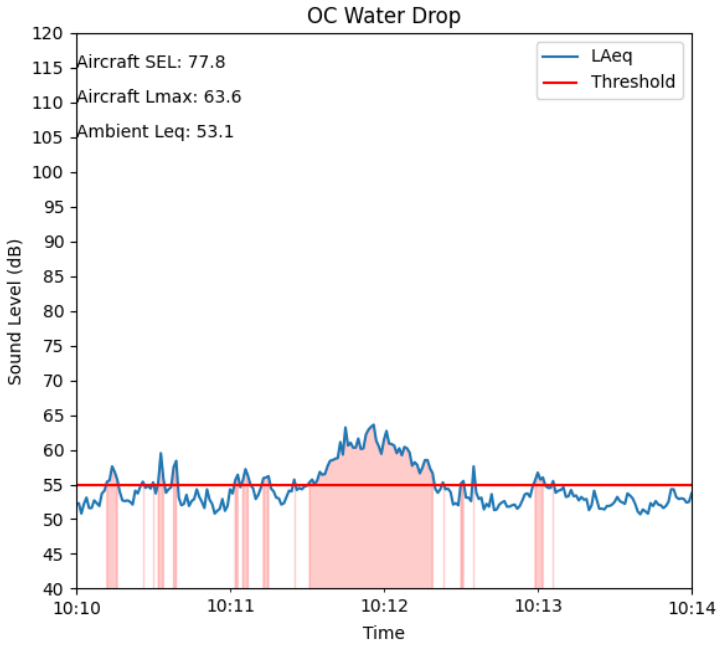
13:52
13:54
13:56
13:58

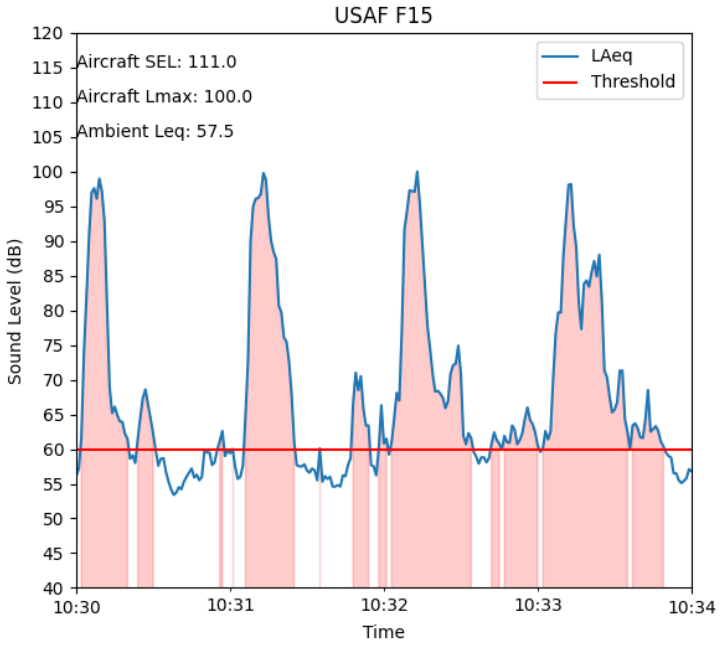

USAF Heritage
Aircraft SEL: 102.0
Aircraft Lmax: 88.7
Ambient Leq: 52.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:20
14:25
14:30
14:35
14:40
14:45
14:50
14:55
15:00

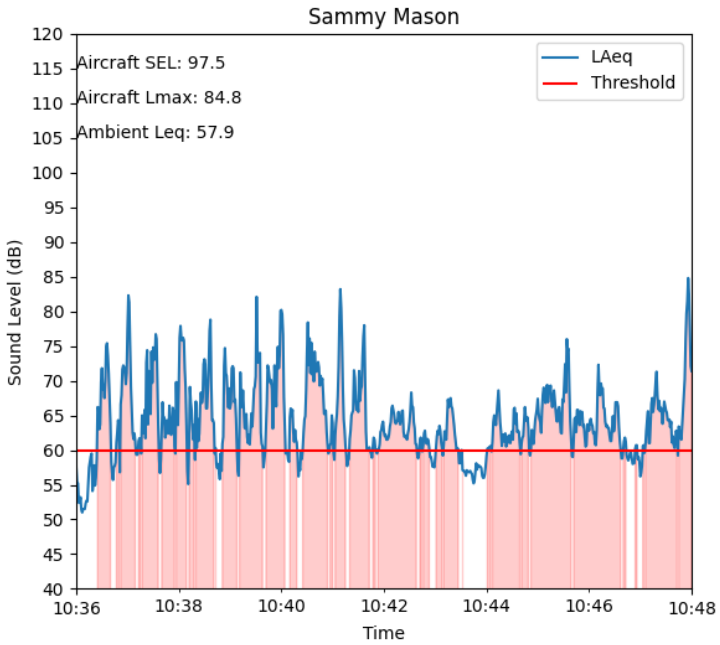

Thunderbirds
Aircraft SEL: 106.4
Aircraft Lmax: 94.3
Ambient Leq: 54.0
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:40
15:45
15:50
15:55
16:00
16:05
16:10
16:15
16:20

Site M2 - Pacific City Park






USAF F15
Aircraft SEL: 111.0
Aircraft Lmax: 100.0
Ambient Leq: 57.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:30
10:31
10:32
10:33
10:34


Sammy Mason
Aircraft SEL: 97.5
Aircraft Lmax: 84.8
Ambient Leq: 57.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:36
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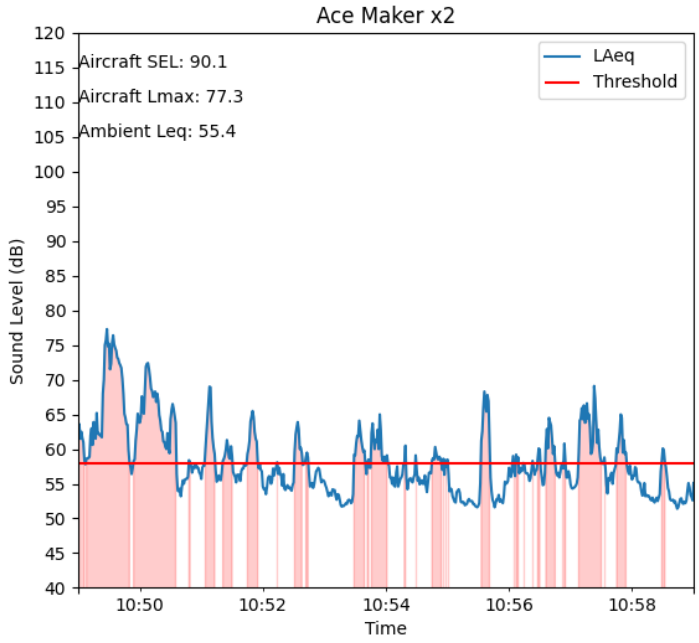
10:44
10:46
10:48


Ace Maker x2
Aircraft SEL: 90.1
Aircraft Lmax: 77.3
Ambient Leq: 55.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:50
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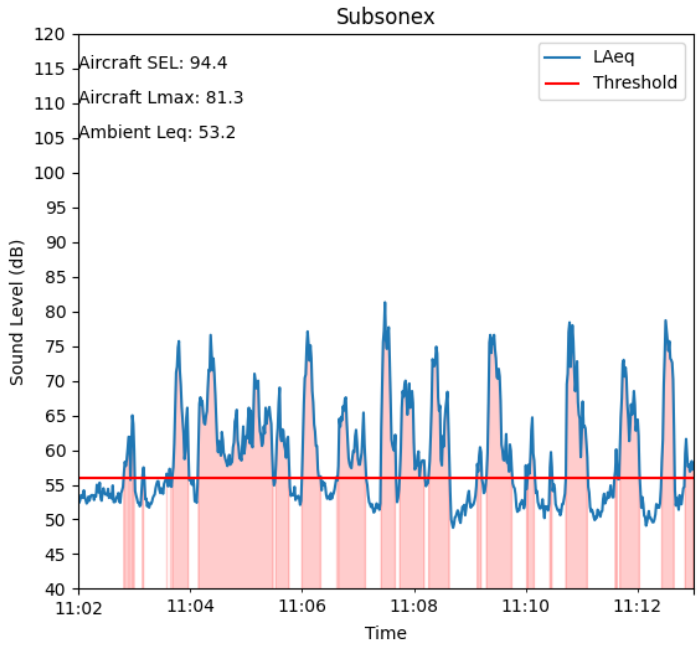
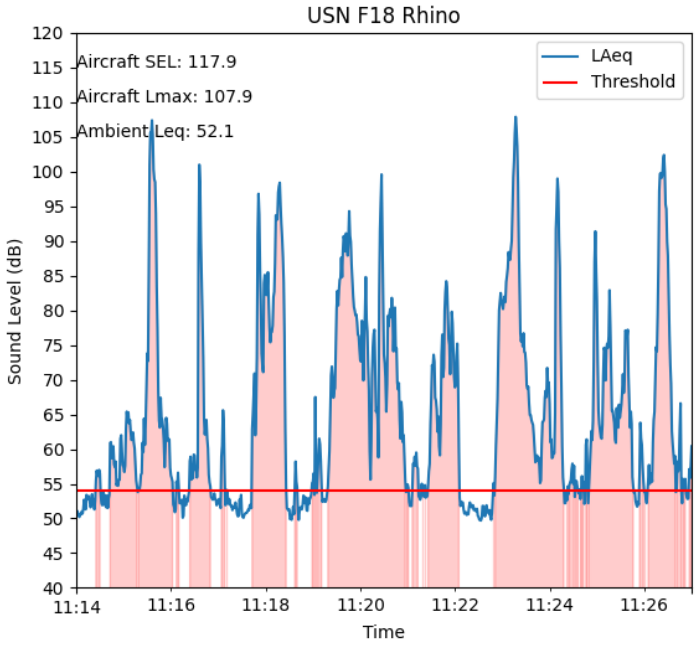
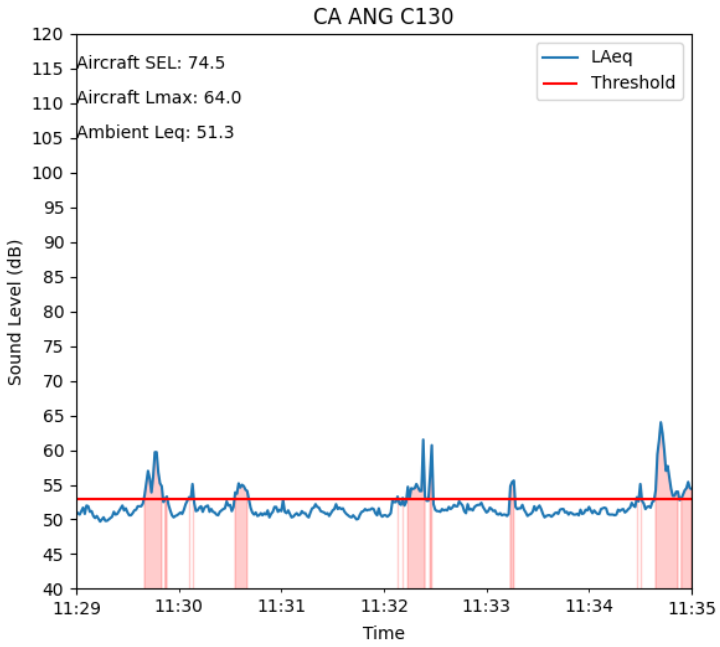
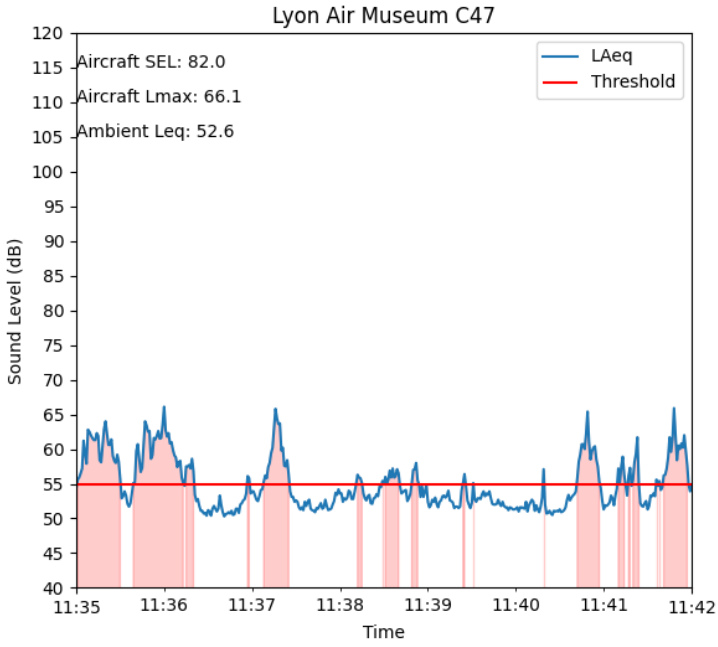
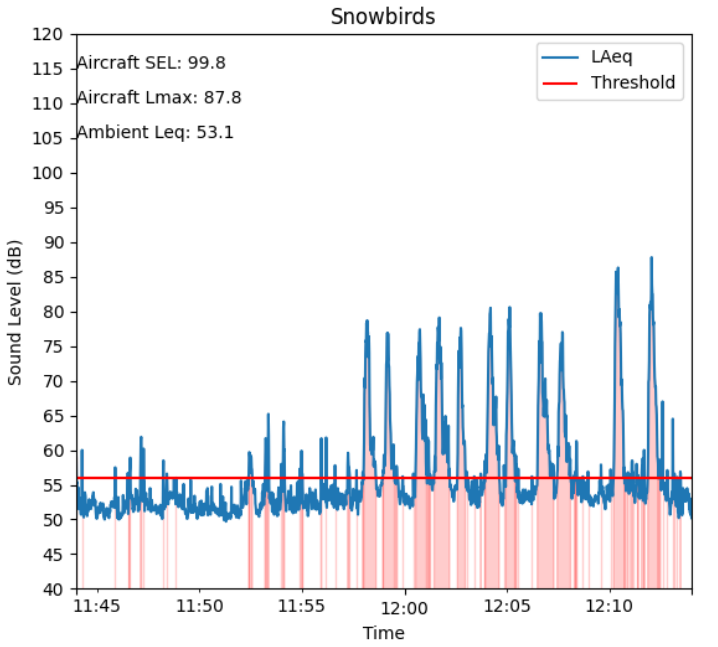
10:54
10:56
10:58

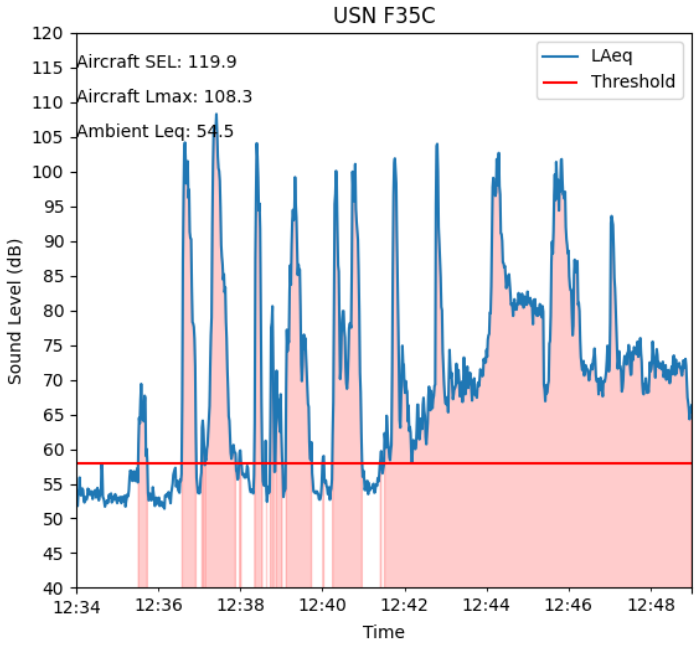

Subsonex
Aircraft SEL: 94.4
Aircraft Lmax: 81.3
Ambient Leq: 53.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:02
11:04
11:06
11:08
11:10
11:12


USN F18 Rhino
Aircraft SEL: 117.9
Aircraft Lmax: 107.9
Ambient Leq: 52.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:14
11:16
11:18
11:20
11:22
11:24
11:26


CA ANG C130
Aircraft SEL: 74.5
Aircraft Lmax: 64.0
Ambient Leq: 51.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:29
11:30
11:31
11:32
11:33
11:34
11:35


Lyon Air Museum C47
Aircraft SEL: 82.0
Aircraft Lmax: 66.1
Ambient Leq: 52.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:35
11:36
11:37
11:38
11:39
11:40
11:41
11:42


Snowbirds
Aircraft SEL: 99.8
Aircraft Lmax: 87.8
Ambient Leq: 53.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:45
11:50
11:55
12:00
12:05
12:10


USN F35C
Aircraft SEL: 119.9
Aircraft Lmax: 108.3
Ambient Leq: 54.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:34
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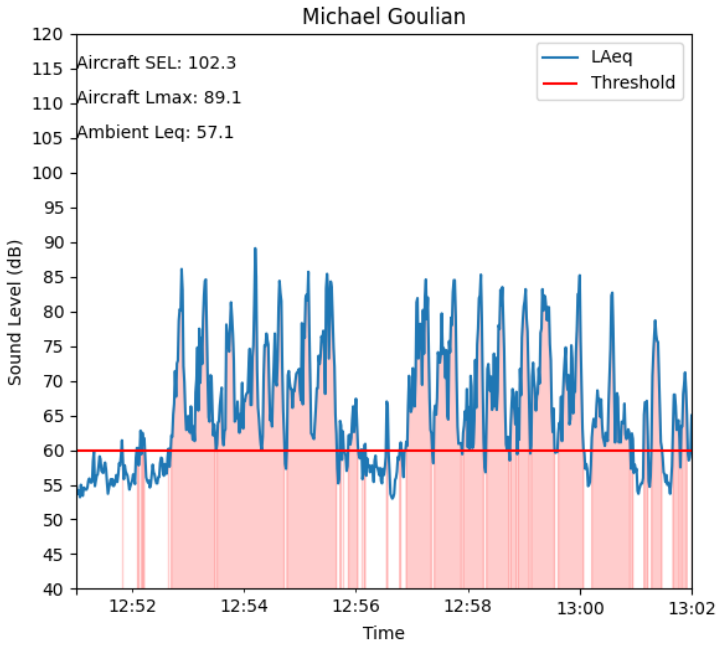
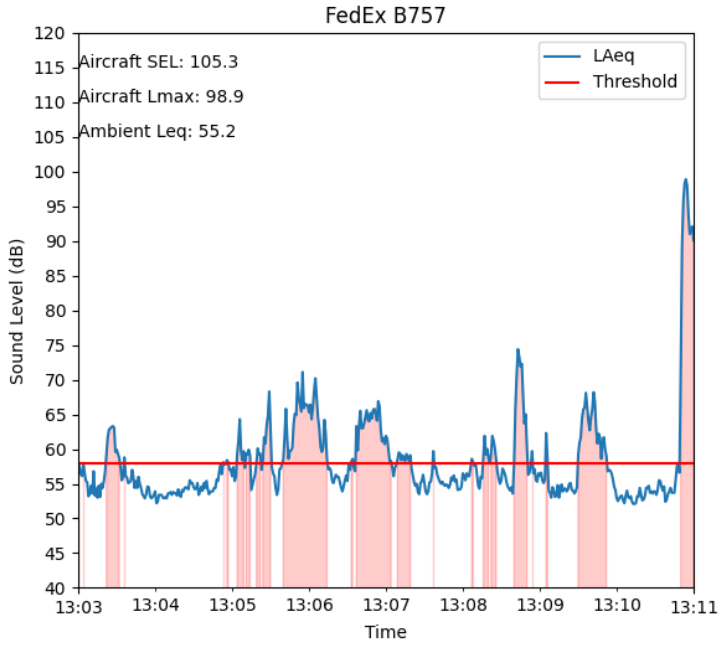
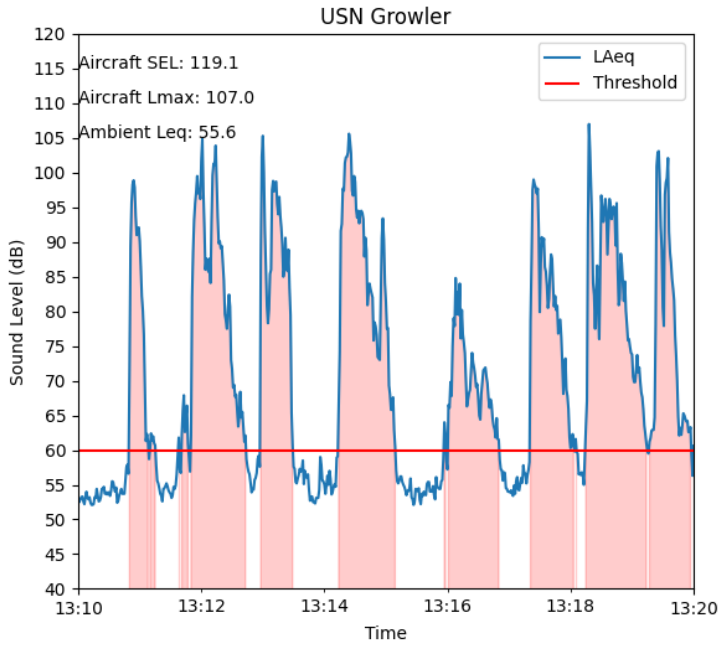
12:44
12:46
12:48


Michael Goulian
Aircraft SEL: 102.3
Aircraft Lmax: 89.1
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:52
12:54
12:56
12:58
13:00
13:02


FedEx B757
Aircraft SEL: 105.3
Aircraft Lmax: 98.9
Ambient Leq: 55.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:03
13:04
13:05
13:06
13:07
13:08
13:09
13:10
13:11


USN Growler
Aircraft SEL: 119.1
Aircraft Lmax: 107.0
Ambient Leq: 55.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:10
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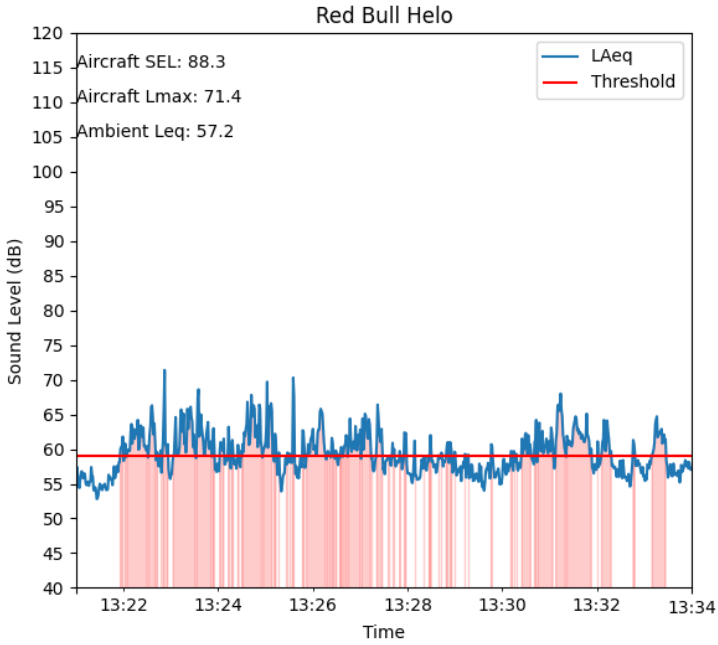
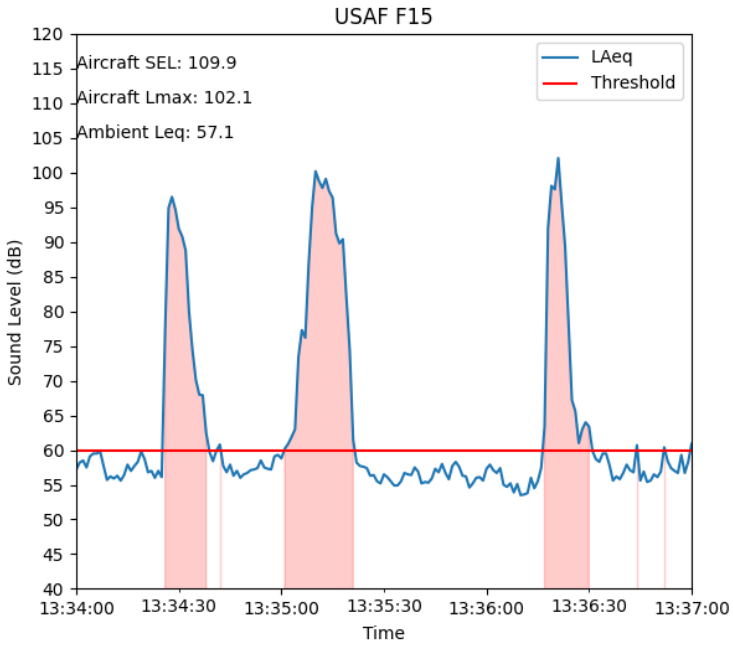
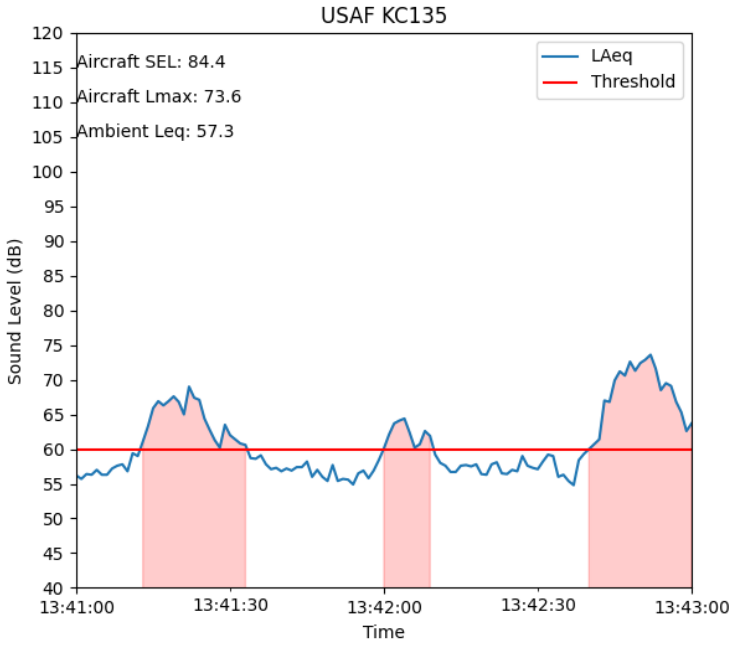
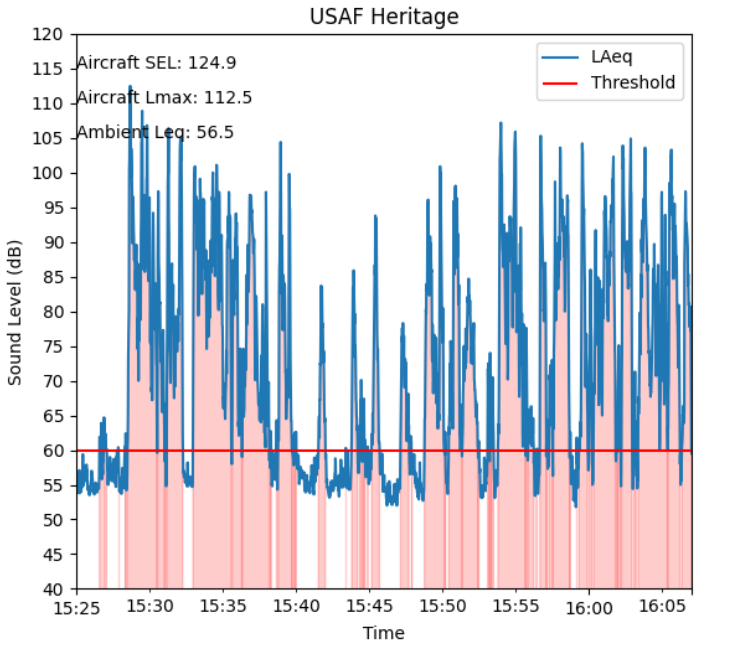
13:16
13:18
13:20

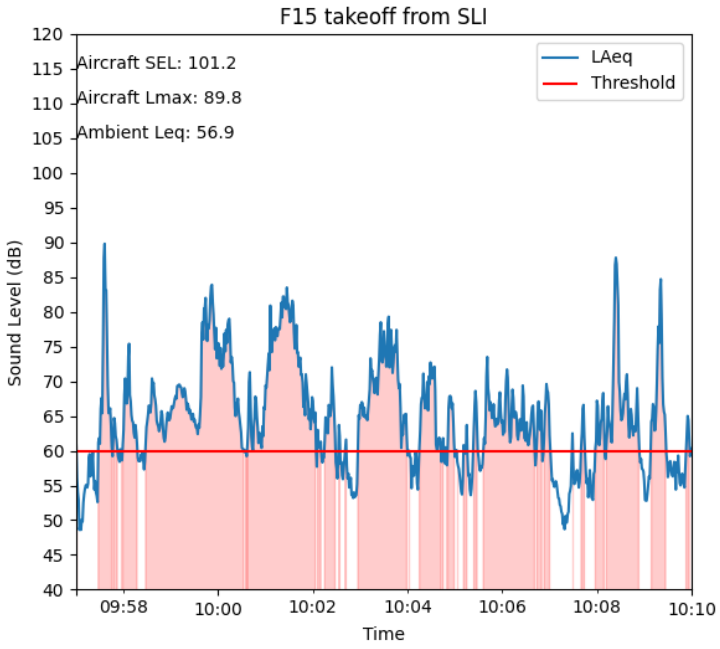

Red Bull Helo
Aircraft SEL: 88.3
Aircraft Lmax: 71.4
Ambient Leq: 57.2
LAeq
Threshold
Sound Level (dB)
Time
13:22
13:24
13:26
13:28
13:30
13:32
13:34

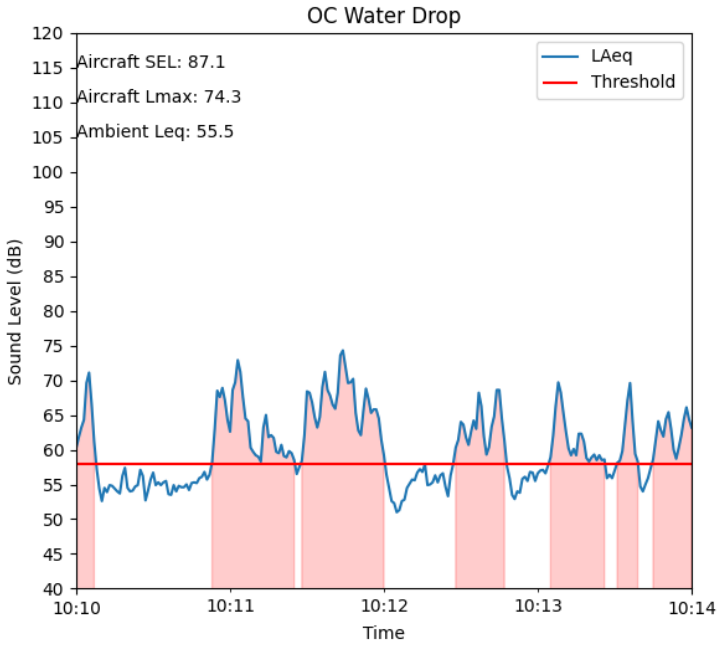

USAF F15
Aircraft SEL: 109.9
Aircraft Lmax: 102.1
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
13:34:00
13:34:30
13:35:00
13:35:30
13:36:00
13:36:30
13:37:00

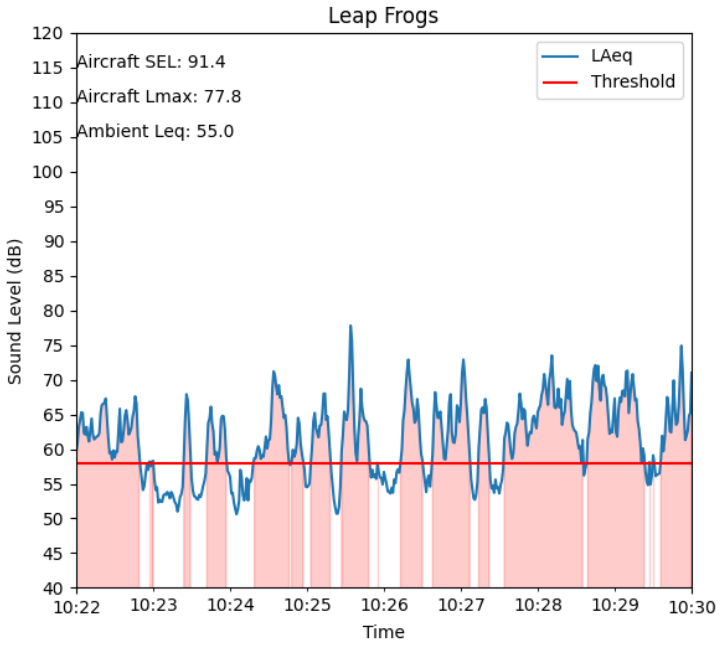

USAF KC135
Aircraft SEL: 84.4
Aircraft Lmax: 73.6
Ambient Leq: 57.3
LAeq
Threshold
Sound Level (dB)
Time
13:41:00
13:41:30
13:42:00
13:42:30
13:43:00

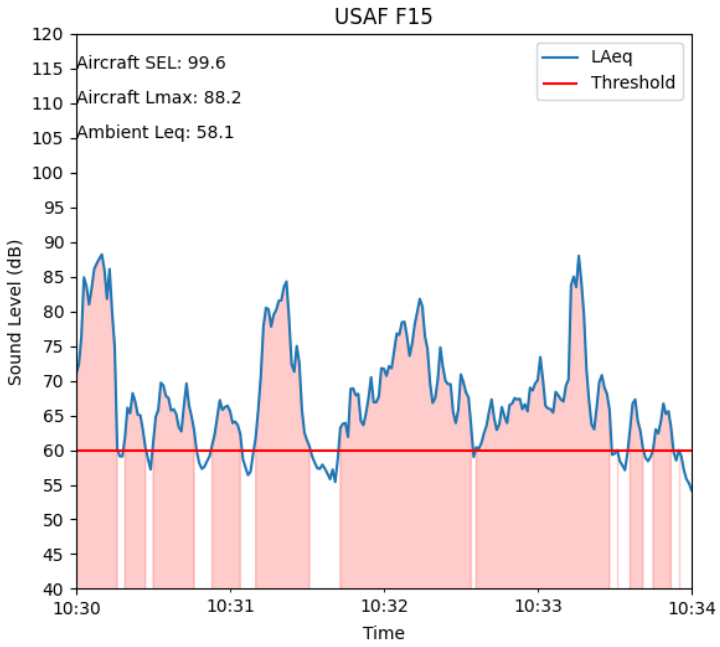

USAF Heritage
Aircraft SEL: 124.9
Aircraft Lmax: 112.5
Ambient Leq: 56.5
LAeq
Threshold
Sound Level (dB)
Time
15:25
15:30
15:35
15:40
15:45
15:50
15:55
16:00
16:05

Site M3 - Hyatt Regency Hotel






Leap Frogs
Aircraft SEL: 91.4
Aircraft Lmax: 77.8
Ambient Leq: 55.0
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:22
10:23
10:24
10:25
10:26
10:27
10:28
10:29
10:30


USAF F15
Aircraft SEL: 99.6
Aircraft Lmax: 88.2
Ambient Leq: 58.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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75
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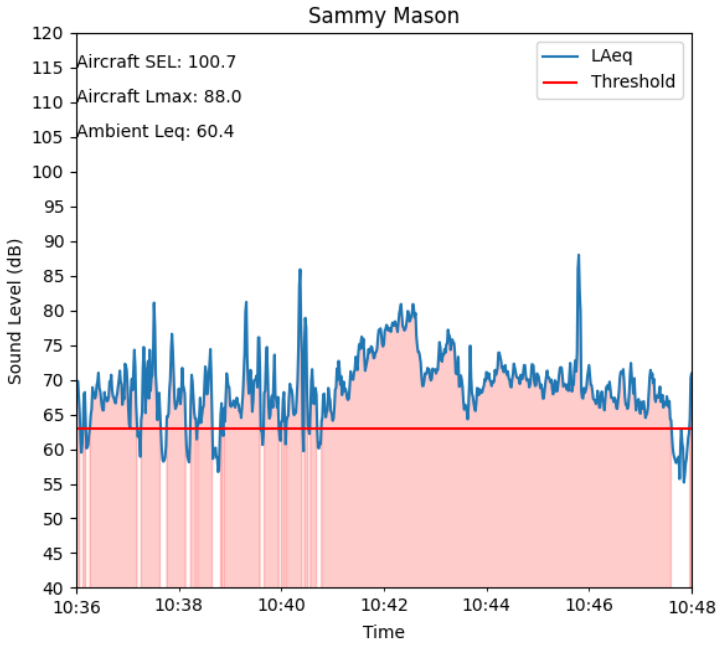
Sammy Mason
Aircraft SEL: 100.7
Aircraft Lmax: 88.0
Ambient Leq: 60.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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10:36
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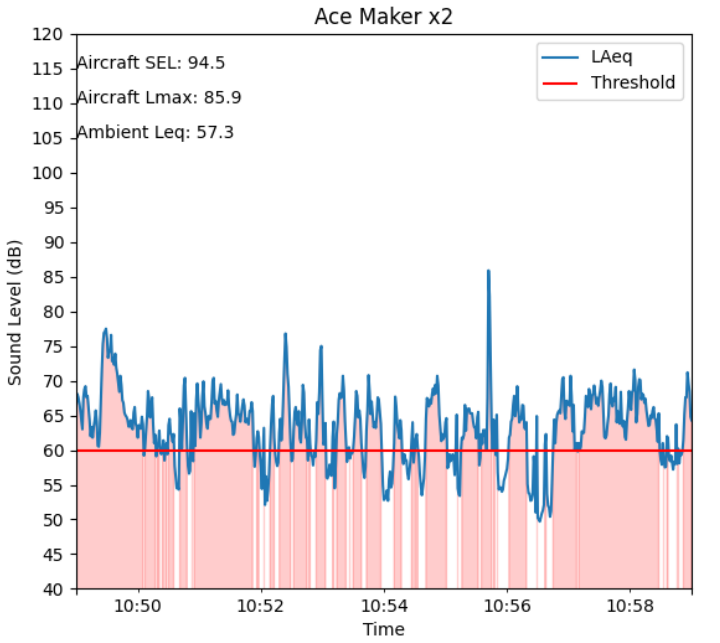
10:46
10:48


Ace Maker x2
Aircraft SEL: 94.5
Aircraft Lmax: 85.9
Ambient Leq: 57.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
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75
70
65
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55
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10:50
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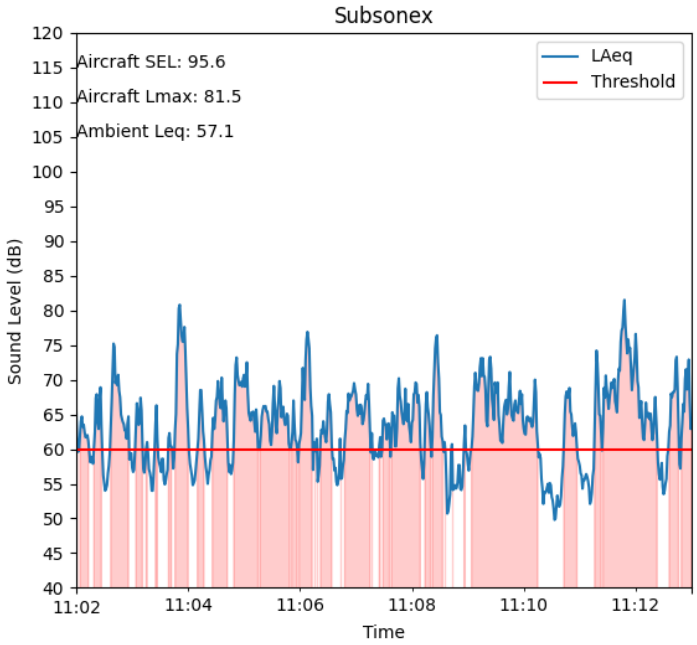
Subsonex
Aircraft SEL: 95.6
Aircraft Lmax: 81.5
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
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65
60
55
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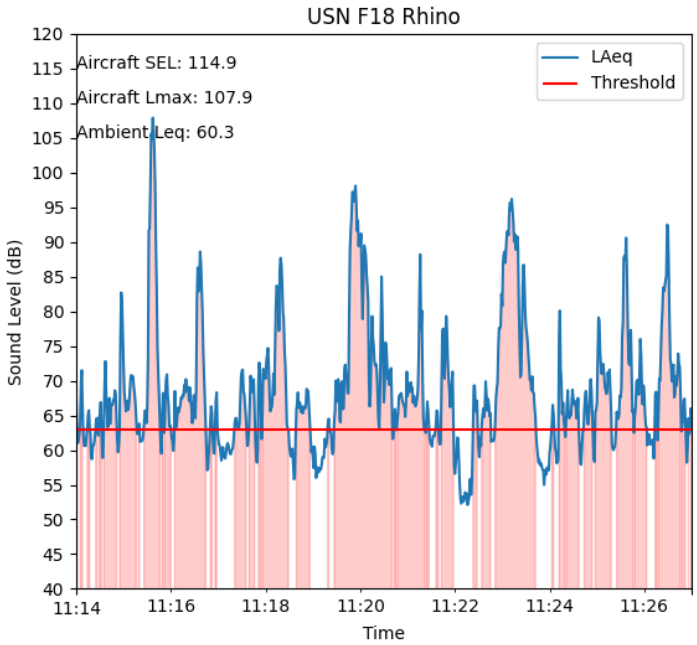
USN F18 Rhino
Aircraft SEL: 114.9
Aircraft Lmax: 107.9
Ambient Leq: 60.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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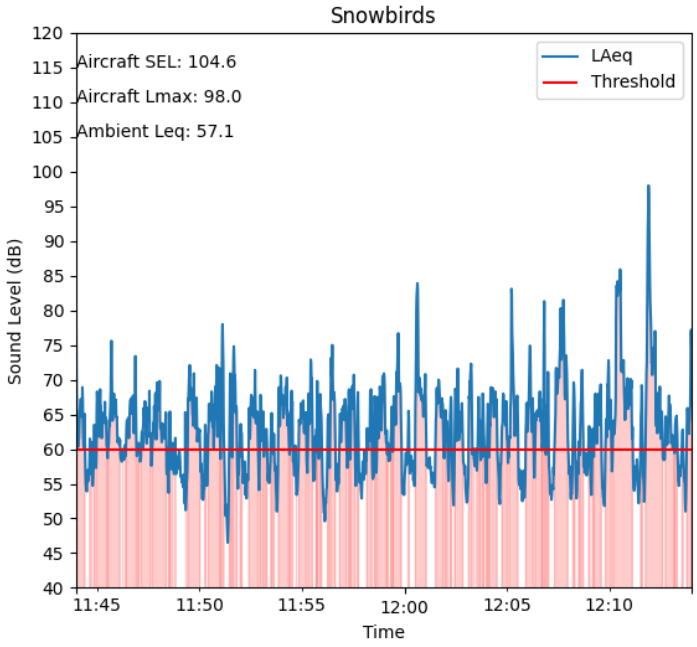
Snowbirds
Aircraft SEL: 104.6
Aircraft Lmax: 98.0
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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60
55
50
45
40
11:45
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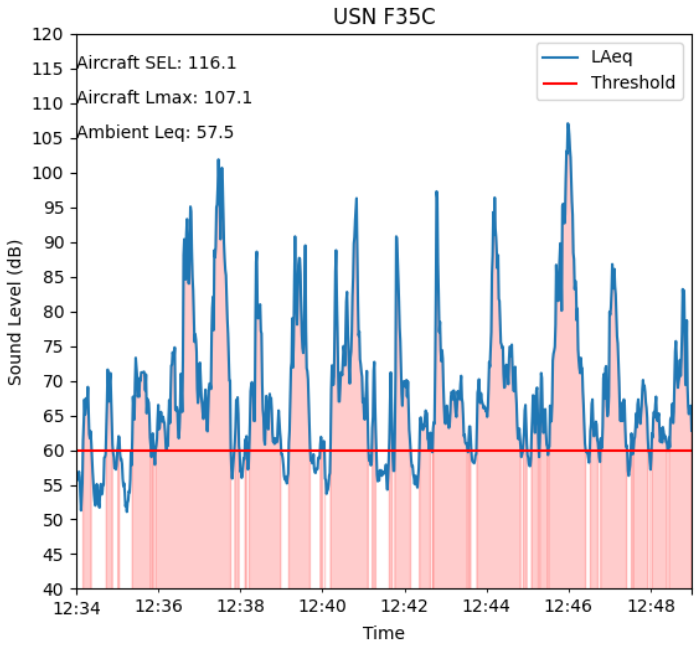
12:05
12:10


USN F35C
Aircraft SEL: 116.1
Aircraft Lmax: 107.1
Ambient Leq: 57.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
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50
45
40
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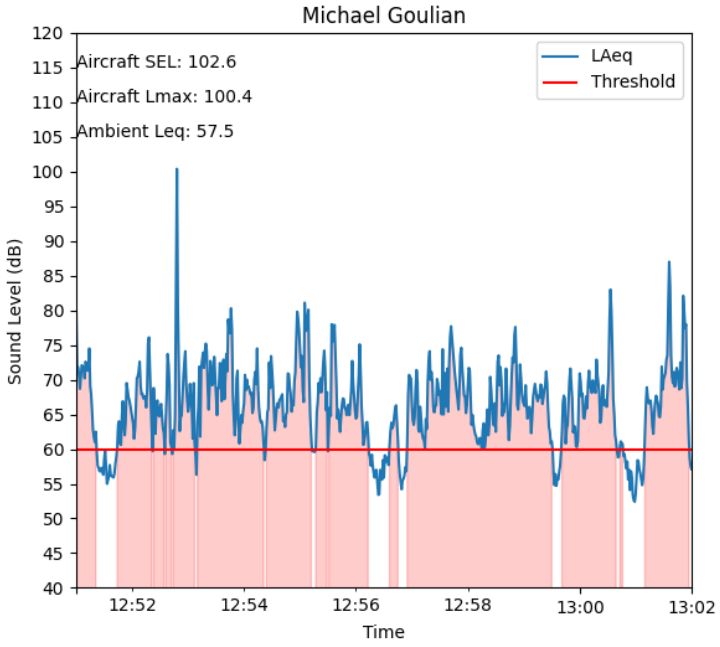
12:46
12:48


Michael Goulian
Aircraft SEL: 102.6
Aircraft Lmax: 100.4
Ambient Leq: 57.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:52
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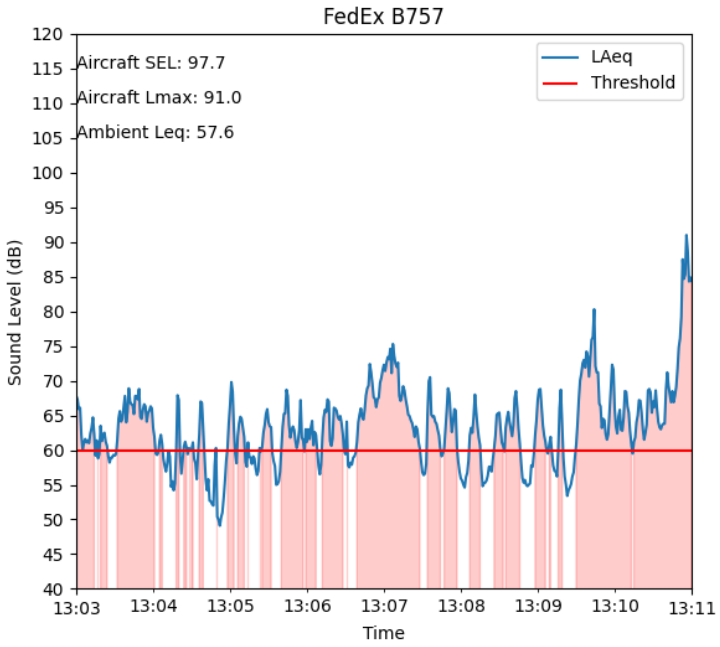
12:58
13:00
13:02


FedEx B757
Aircraft SEL: 97.7
Aircraft Lmax: 91.0
Ambient Leq: 57.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
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40
13:03
13:04
13:05
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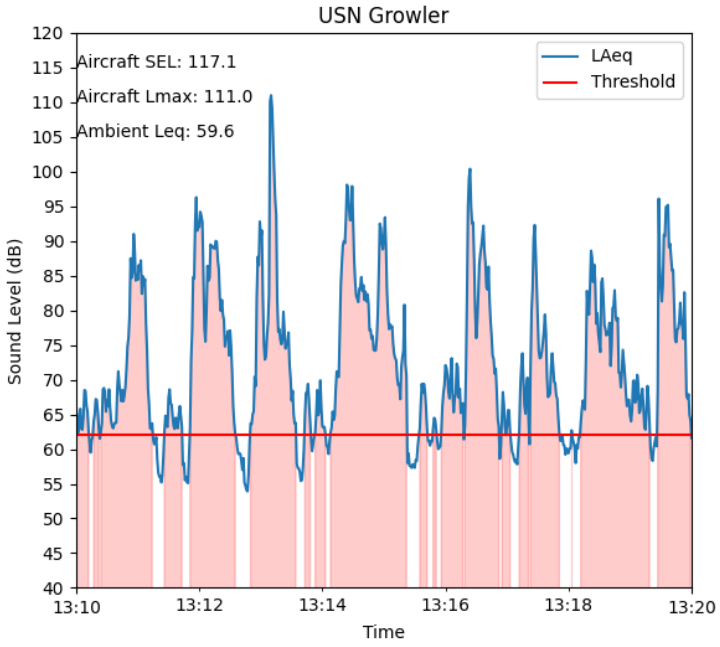
USN Growler
Aircraft SEL: 117.1
Aircraft Lmax: 111.0
Ambient Leq: 59.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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70
65
60
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45
40
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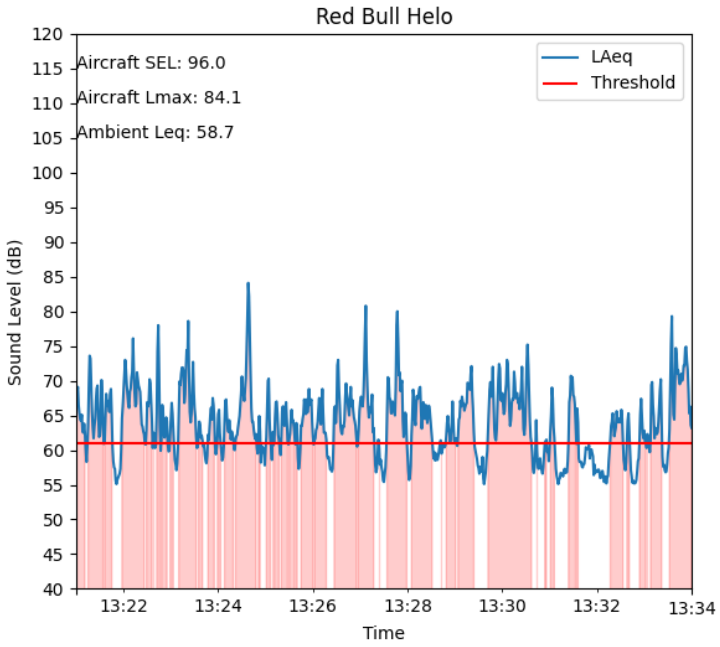
Red Bull Helo
Aircraft SEL: 96.0
Aircraft Lmax: 84.1
Ambient Leq: 58.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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70
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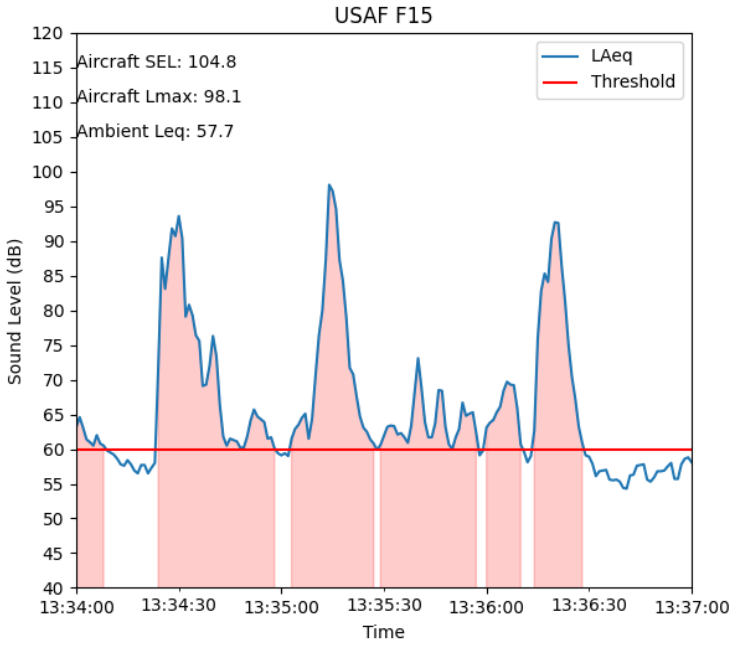
USAF F15
Aircraft SEL: 104.8
Aircraft Lmax: 98.1
Ambient Leq: 57.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
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13:34:00
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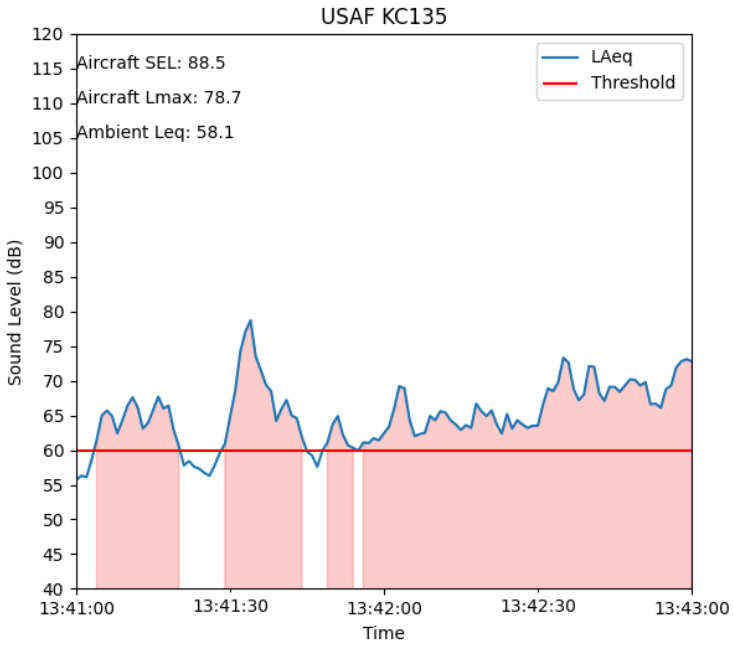
13:35:30
13:36:00
13:36:30
13:37:00


USAF KC135
Aircraft SEL: 88.5
Aircraft Lmax: 78.7
Ambient Leq: 58.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
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60
55
50
45
40
13:41:00
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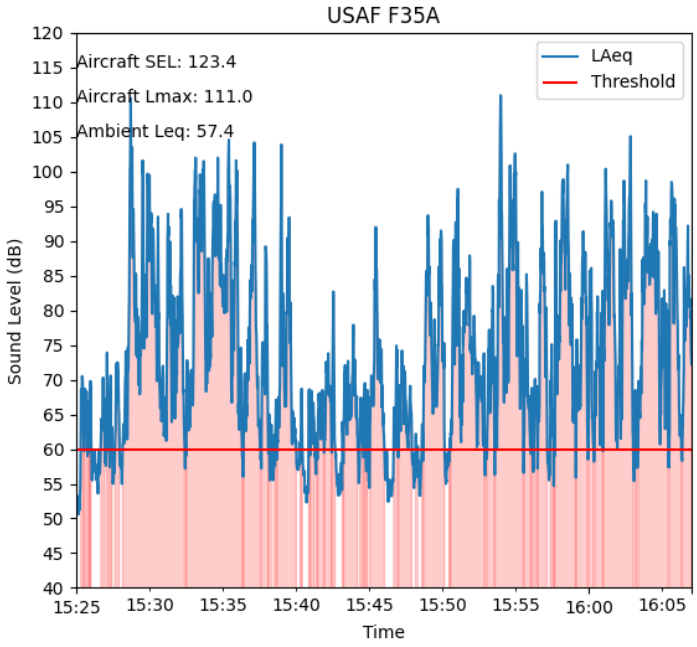
13:42:30
13:43:00


USAF F35A
Aircraft SEL: 123.4
Aircraft Lmax: 111.0
Ambient Leq: 57.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
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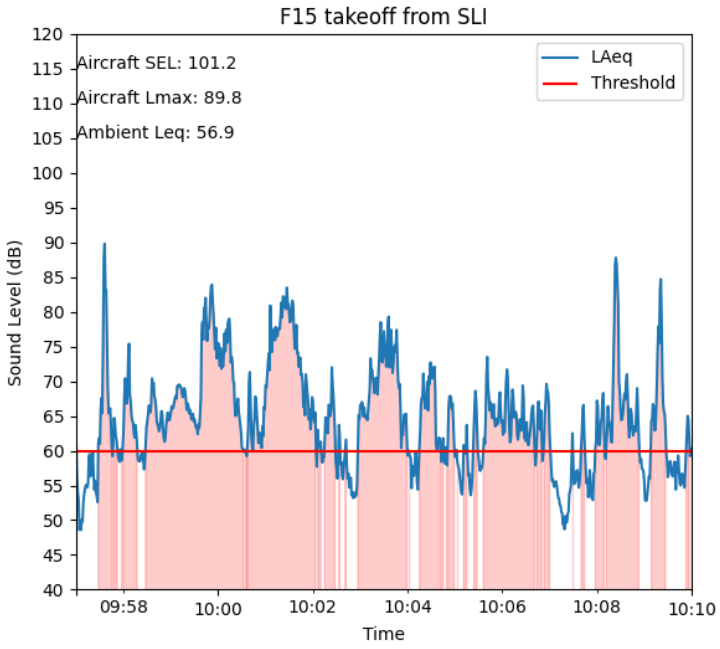
15:40
15:45
15:50
15:55
16:00
16:05

Site M3


F15 takeoff from SLI
Aircraft SEL: 101.2
Aircraft Lmax: 89.8
Ambient Leq: 56.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
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09:58
10:00
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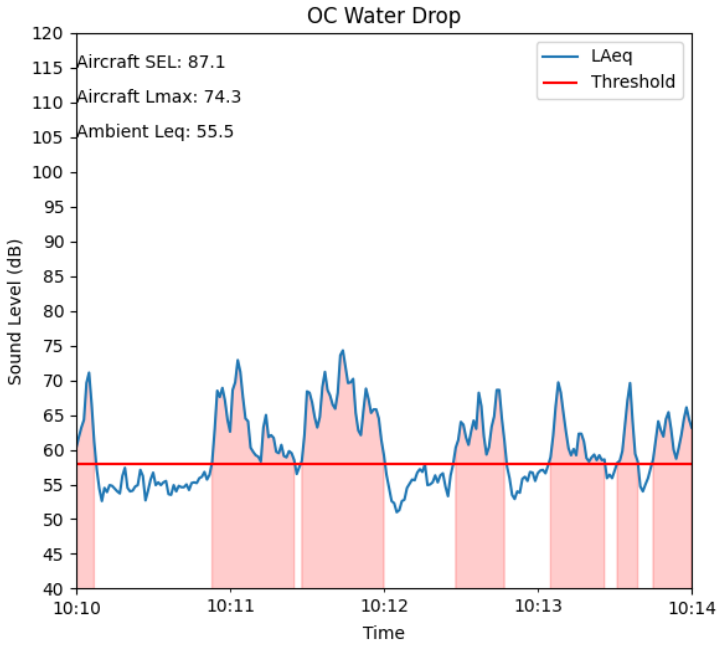
10:10


OC Water Drop
Aircraft SEL: 87.1
Aircraft Lmax: 74.3
Ambient Leq: 55.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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75
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55
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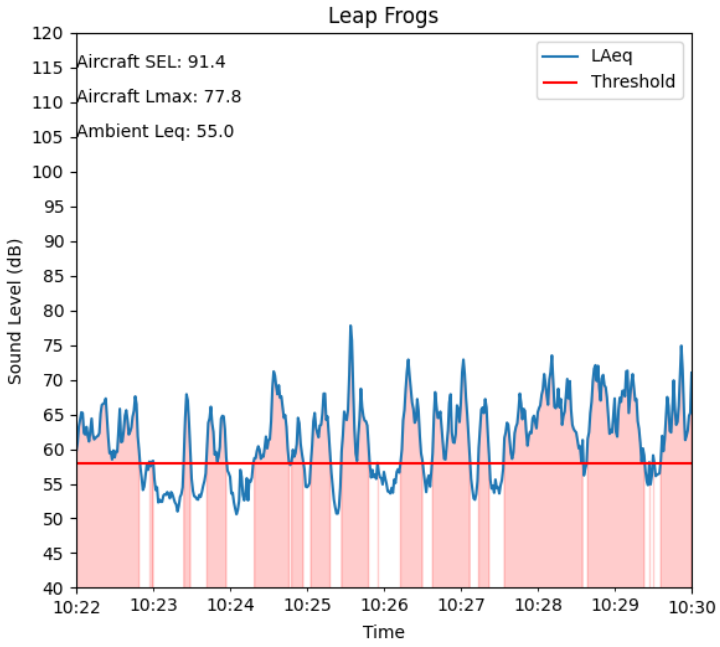
Leap Frogs
Aircraft SEL: 91.4
Aircraft Lmax: 77.8
Ambient Leq: 55.0
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
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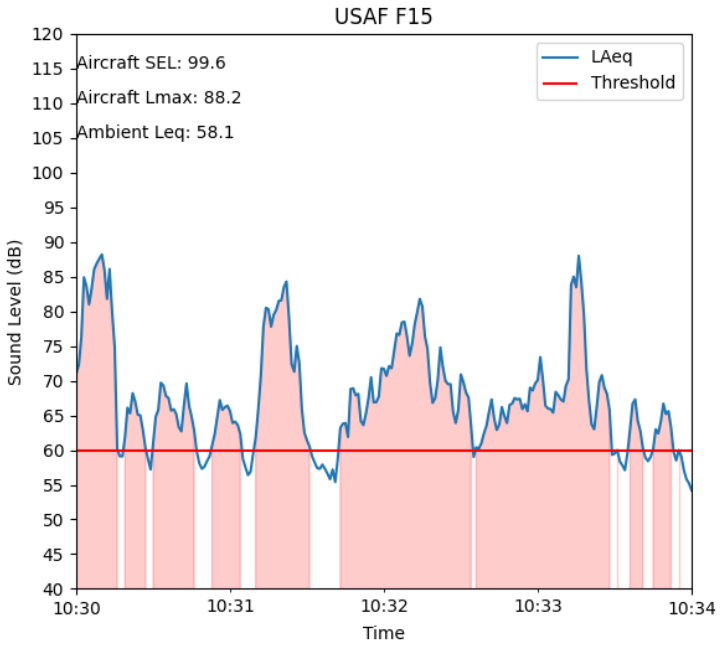
USAF F15
Aircraft SEL: 99.6
Aircraft Lmax: 88.2
Ambient Leq: 58.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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75
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10:30
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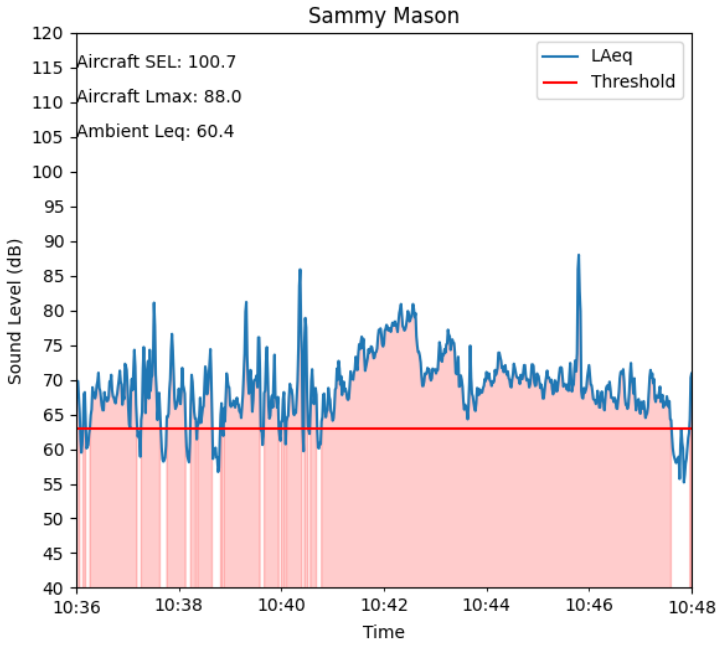
10:33
10:34


Sammy Mason
Aircraft SEL: 100.7
Aircraft Lmax: 88.0
Ambient Leq: 60.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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60
55
50
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40
10:36
10:38
10:40
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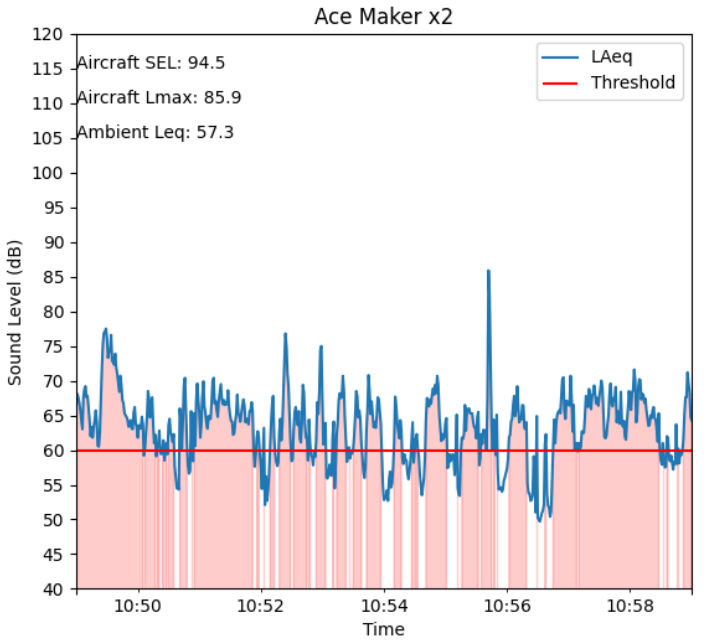
10:48


Ace Maker x2
Aircraft SEL: 94.5
Aircraft Lmax: 85.9
Ambient Leq: 57.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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75
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10:50
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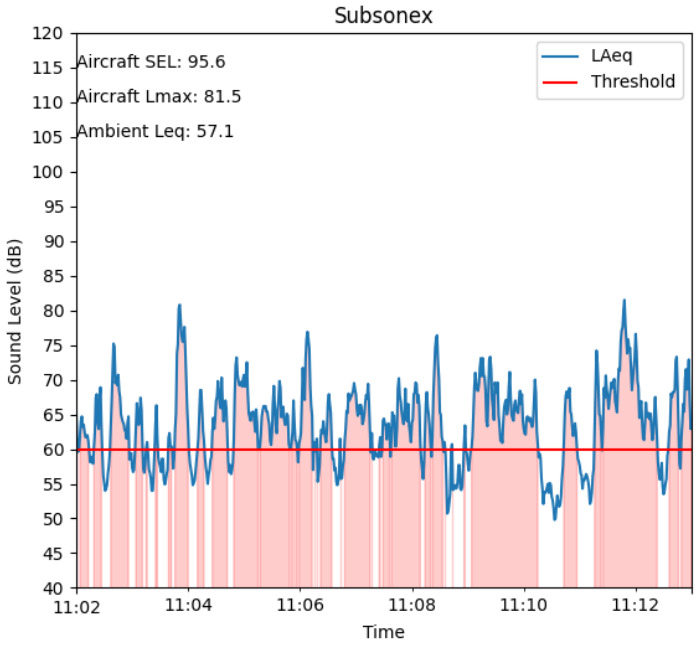
10:58


Subsonex
Aircraft SEL: 95.6
Aircraft Lmax: 81.5
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
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40
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11:04
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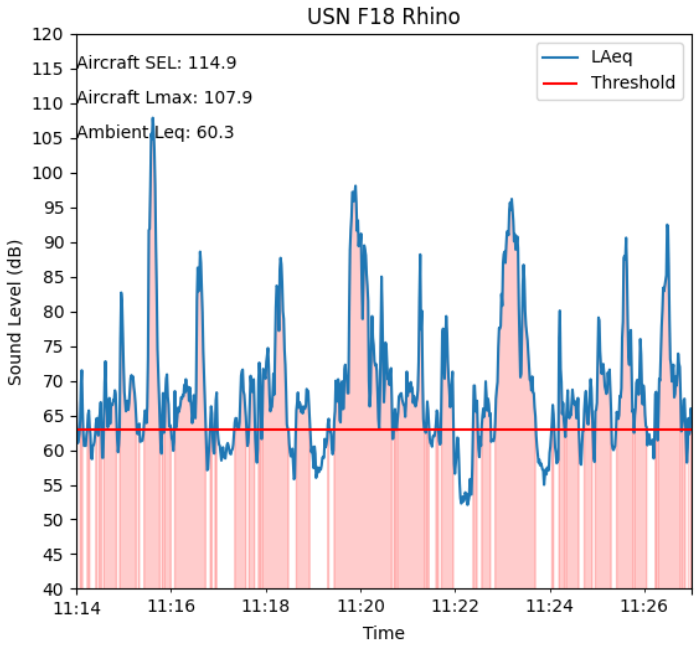
11:12


USN F18 Rhino
Aircraft SEL: 114.9
Aircraft Lmax: 107.9
Ambient Leq: 60.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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70
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55
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45
40
11:14
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11:24
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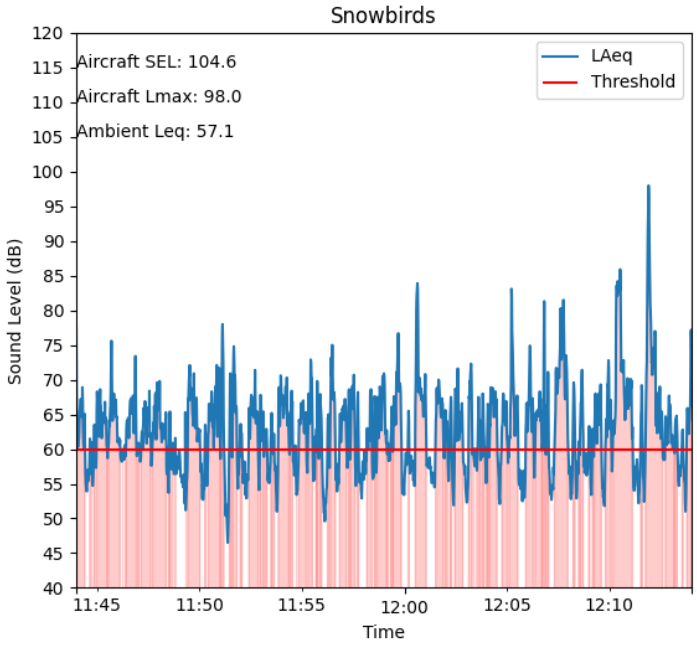
Snowbirds
Aircraft SEL: 104.6
Aircraft Lmax: 98.0
Ambient Leq: 57.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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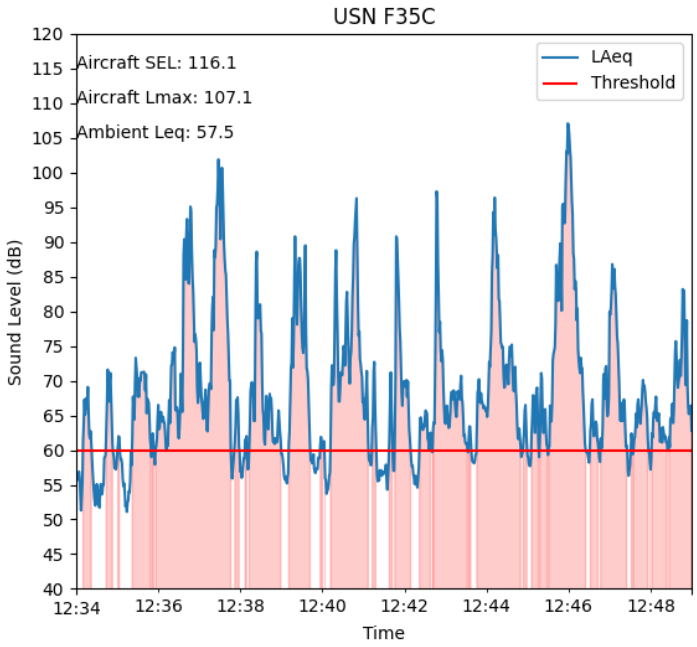
12:00
12:05
12:10


USN F35C
Aircraft SEL: 116.1
Aircraft Lmax: 107.1
Ambient Leq: 57.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
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50
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40
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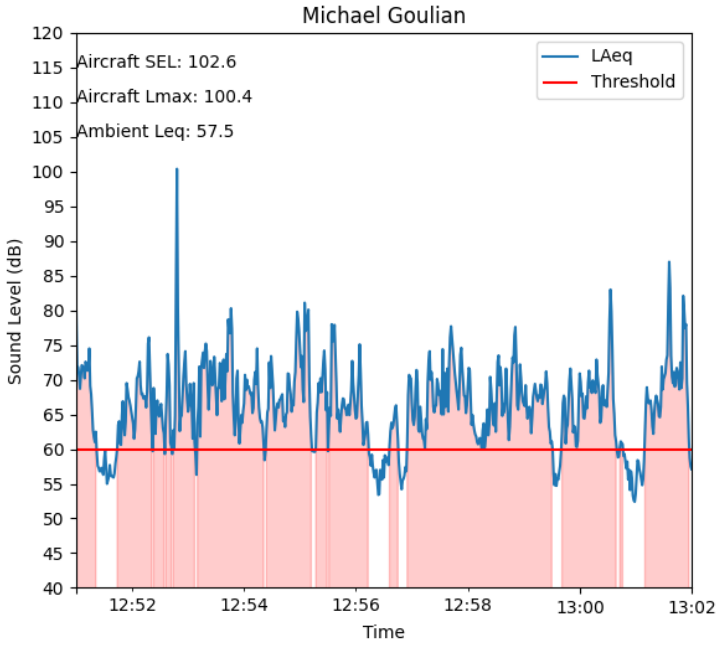
12:48


Michael Goulian
Aircraft SEL: 102.6
Aircraft Lmax: 100.4
Ambient Leq: 57.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
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65
60
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45
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12:52
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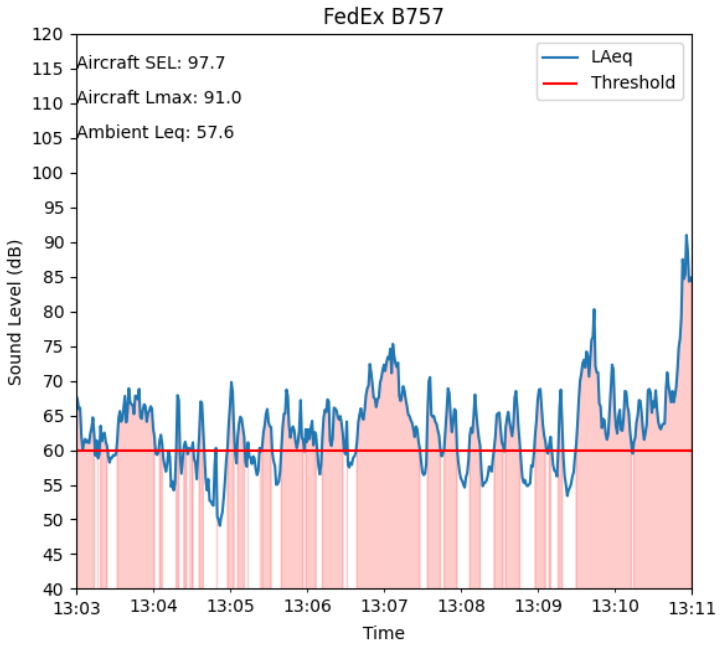
13:00
13:02


FedEx B757
Aircraft SEL: 97.7
Aircraft Lmax: 91.0
Ambient Leq: 57.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
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13:03
13:04
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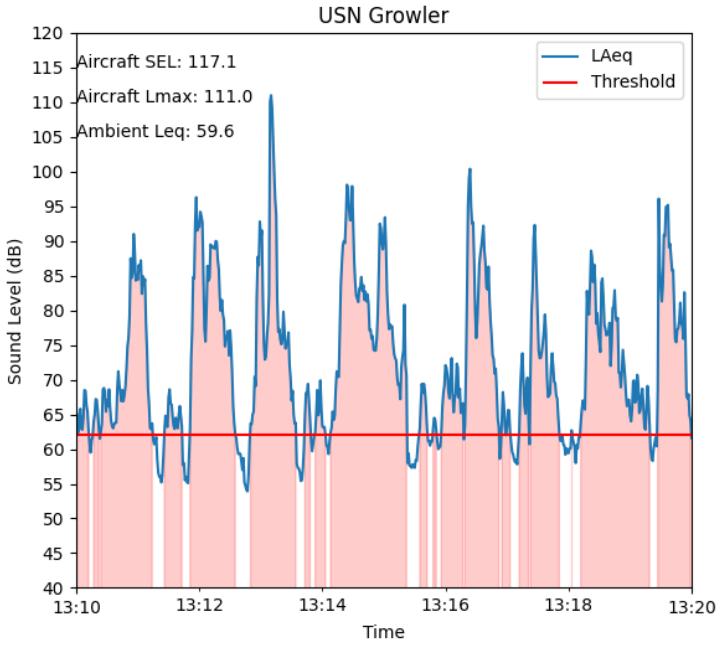
13:10
13:11


USN Growler
Aircraft SEL: 117.1
Aircraft Lmax: 111.0
Ambient Leq: 59.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
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45
40
13:10
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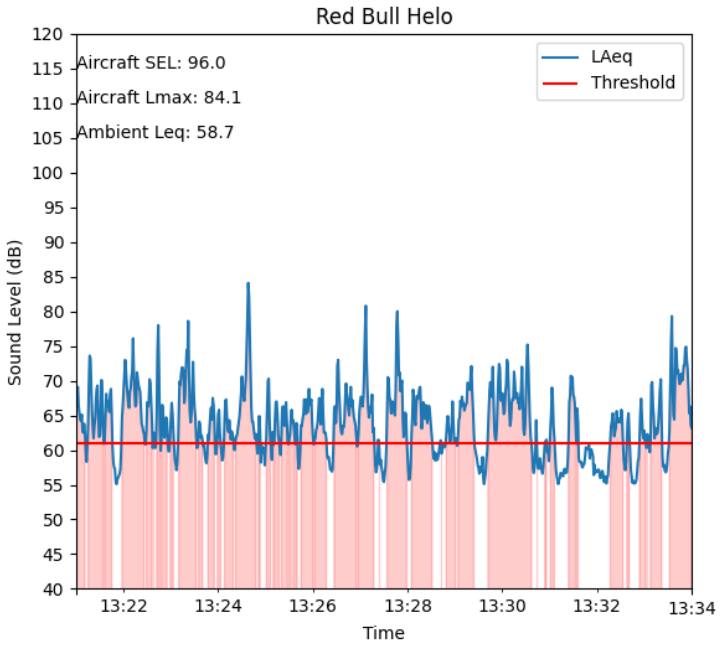
Red Bull Helo
Aircraft SEL: 96.0
Aircraft Lmax: 84.1
Ambient Leq: 58.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
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13:22
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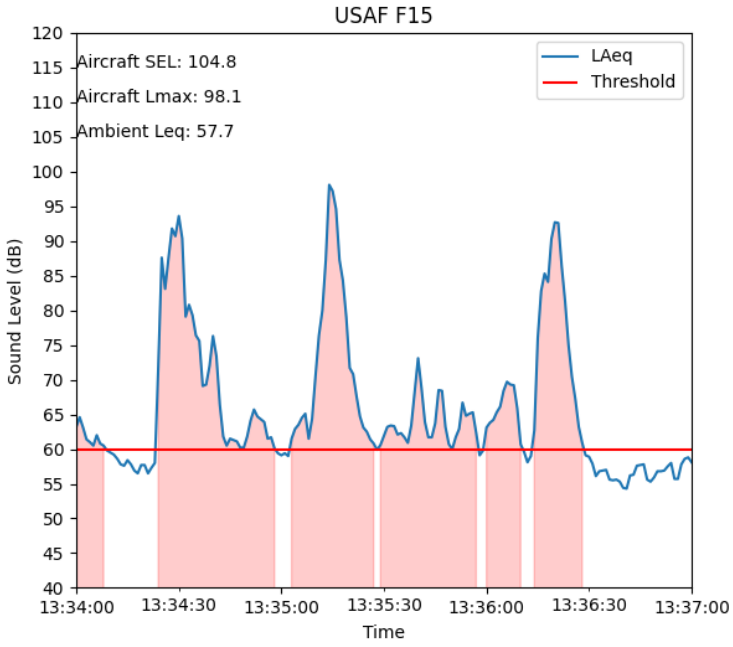
USAF F15
Aircraft SEL: 104.8
Aircraft Lmax: 98.1
Ambient Leq: 57.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
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13:34:00
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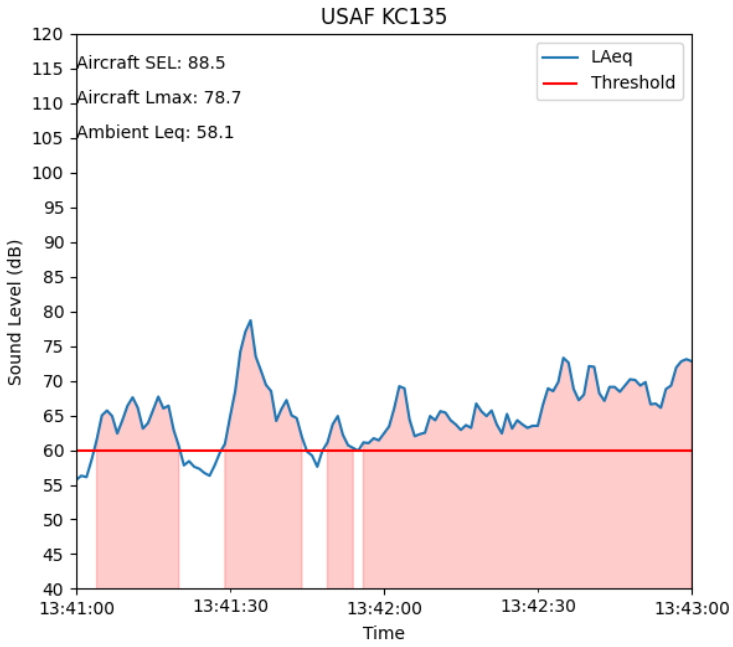
13:37:00


USAF KC135
Aircraft SEL: 88.5
Aircraft Lmax: 78.7
Ambient Leq: 58.1
LAeq
Threshold
Sound Level (dB)
Time
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110
105
100
95
90
85
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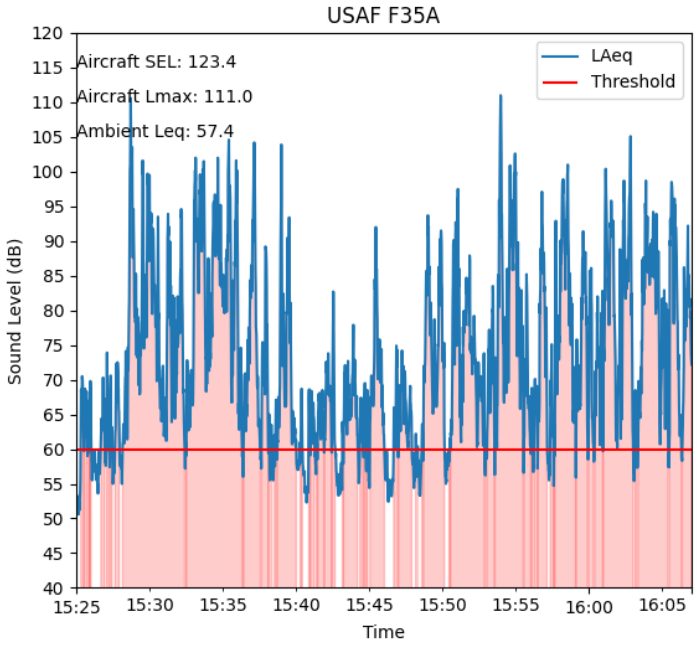
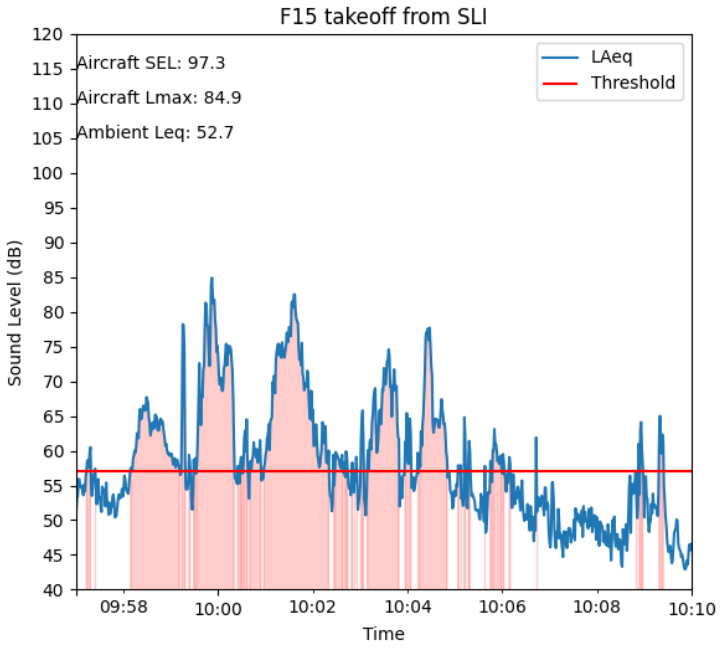
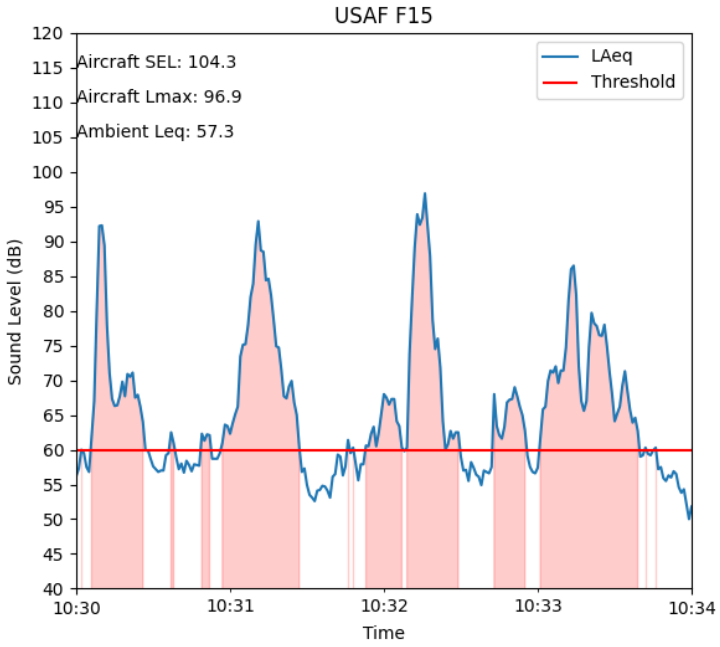
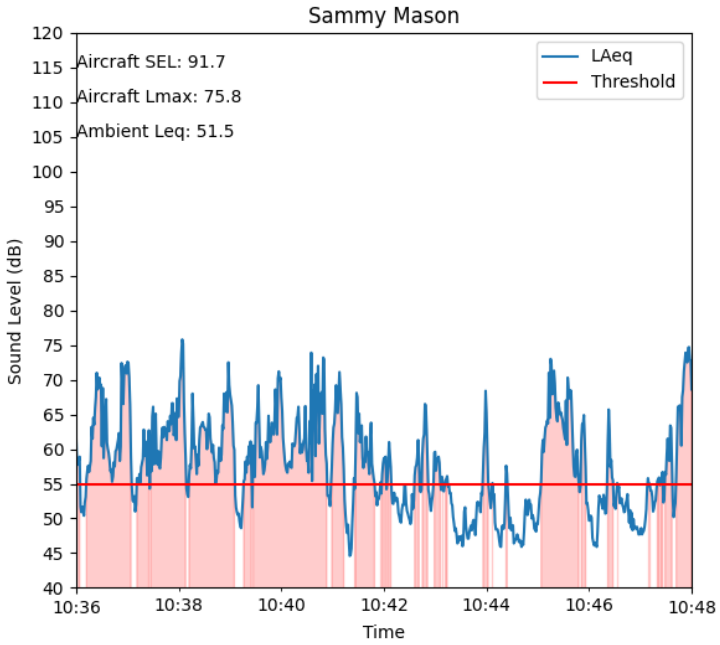
70
65
60
55
50
45
40
13:41:00
13:41:30
13:42:00
13:42:30
13:43:00

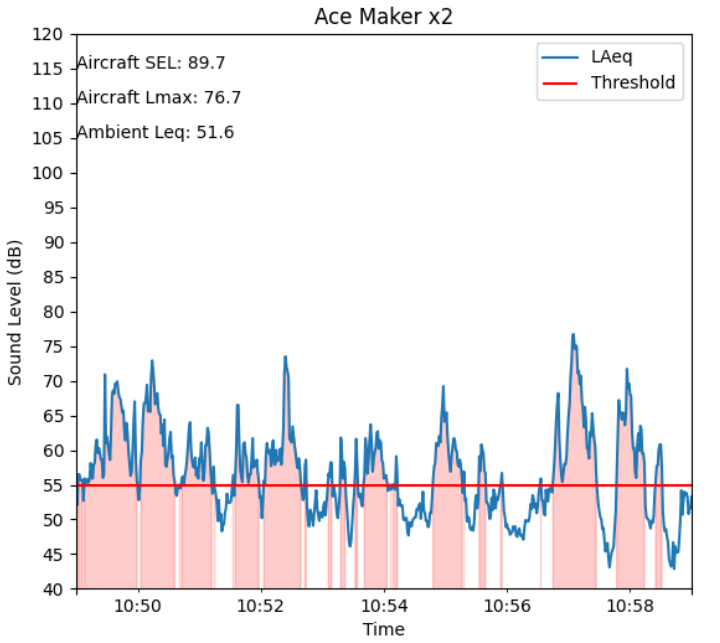

USAF F35A
Aircraft SEL: 123.4
Aircraft Lmax: 111.0
Ambient Leq: 57.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:25
15:30
15:35
15:40
15:45
15:50
15:55
16:00
16:05

Site M4 - Pecan Avenue and 8th Street






Sammy Mason
Aircraft SEL: 91.7
Aircraft Lmax: 75.8
Ambient Leq: 51.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:36
10:38
10:40
10:42
10:44
10:46
10:48


Ace Maker x2
Aircraft SEL: 89.7
Aircraft Lmax: 76.7
Ambient Leq: 51.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:50
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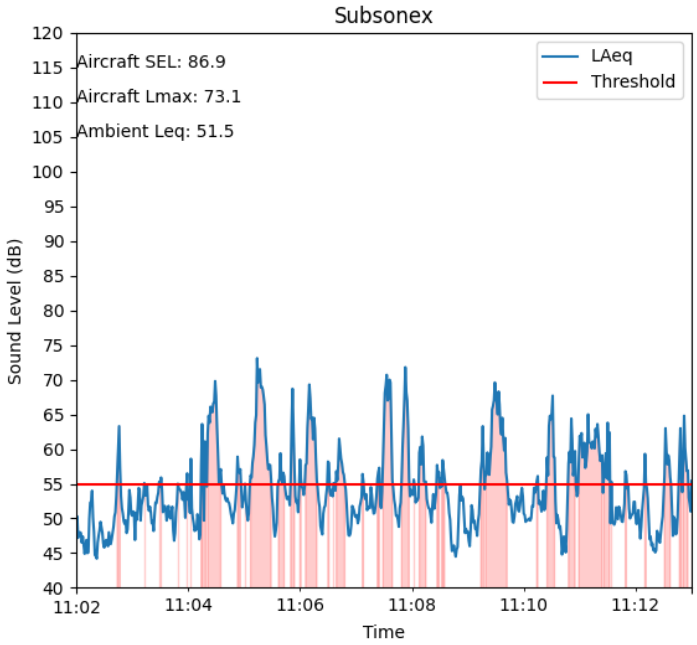
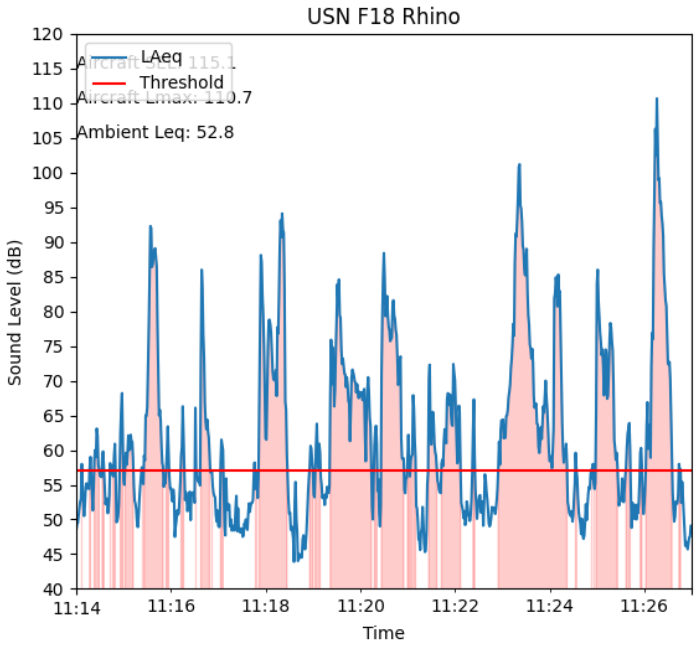
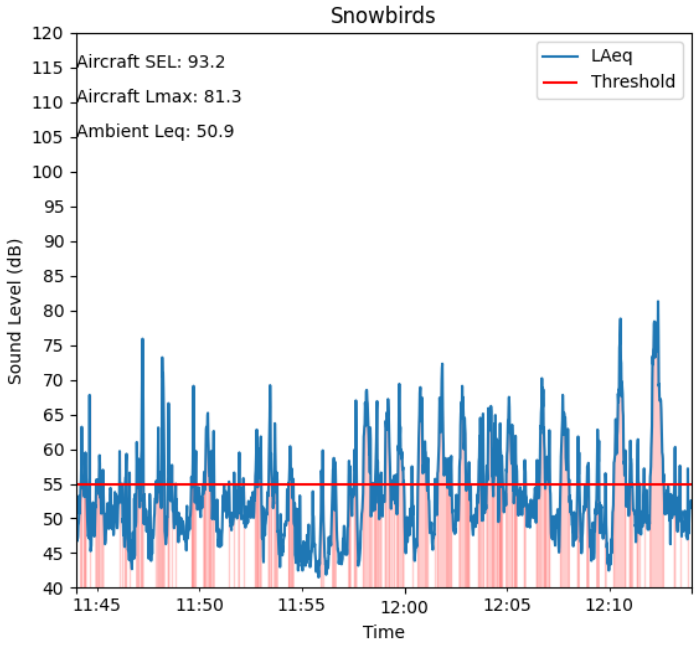
10:54
10:56
10:58


Subsonex
Aircraft SEL: 86.9
Aircraft Lmax: 73.1
Ambient Leq: 51.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:02
11:04
11:06
11:08
11:10
11:12


USN F18 Rhino
LAeq
Threshold
Ambient Leq: 52.8
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:14
11:16
11:18
11:20
11:22
11:24
11:26


Snowbirds
Aircraft SEL: 93.2
Aircraft Lmax: 81.3
Ambient Leq: 50.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:45
11:50
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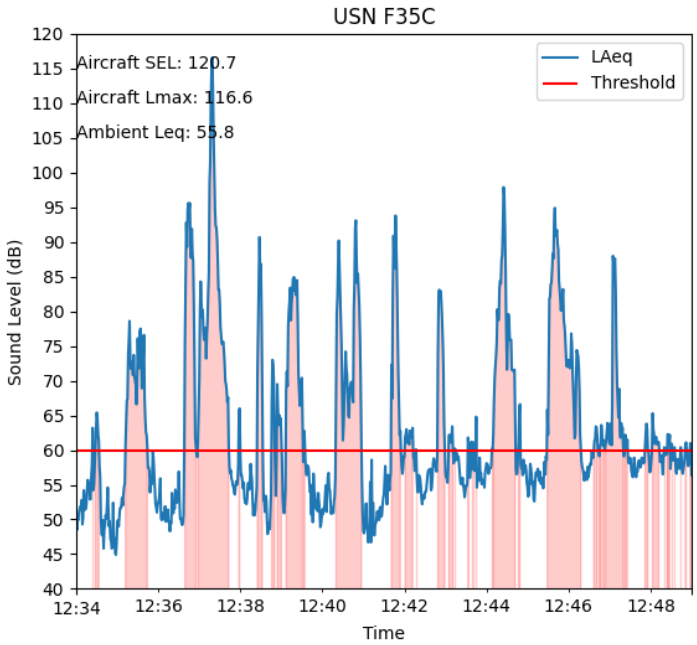
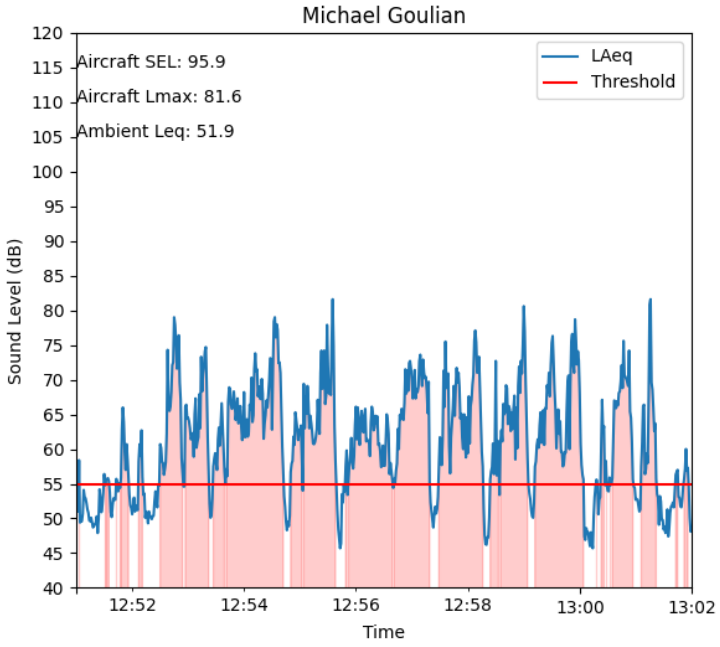
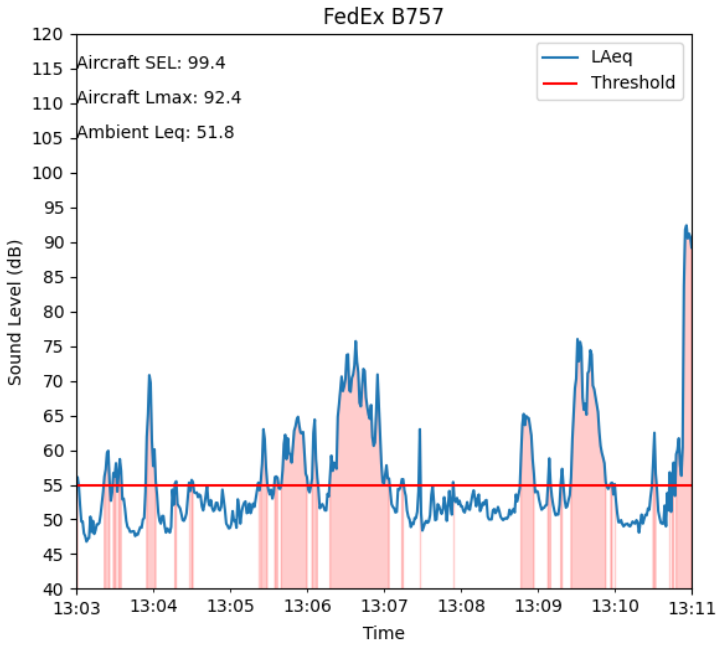
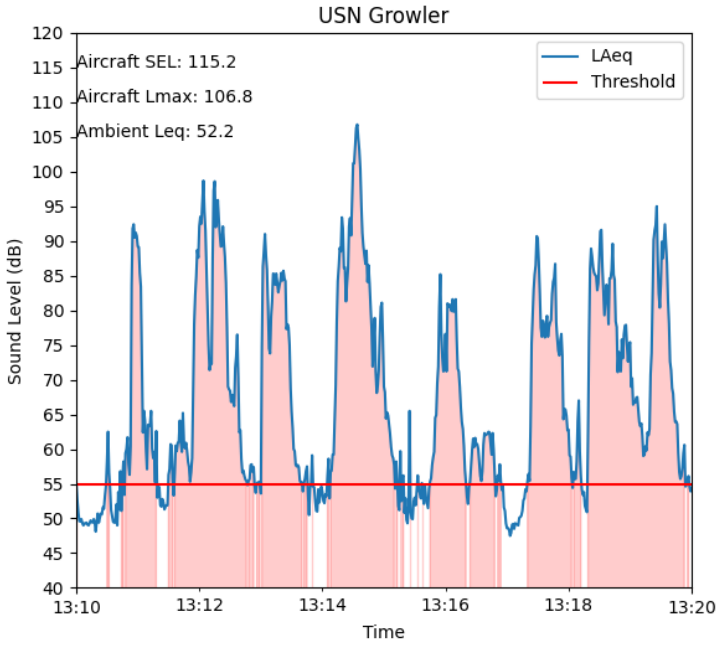
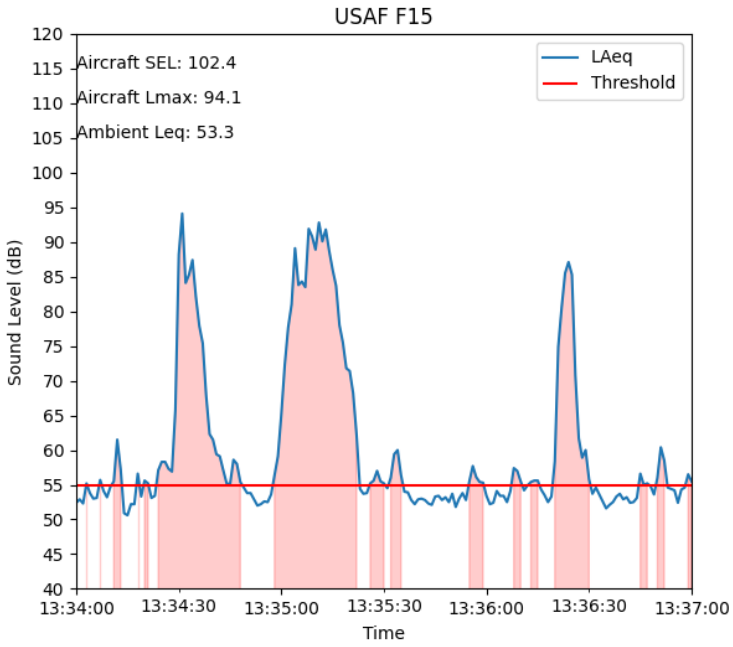
12:00
12:05
12:10

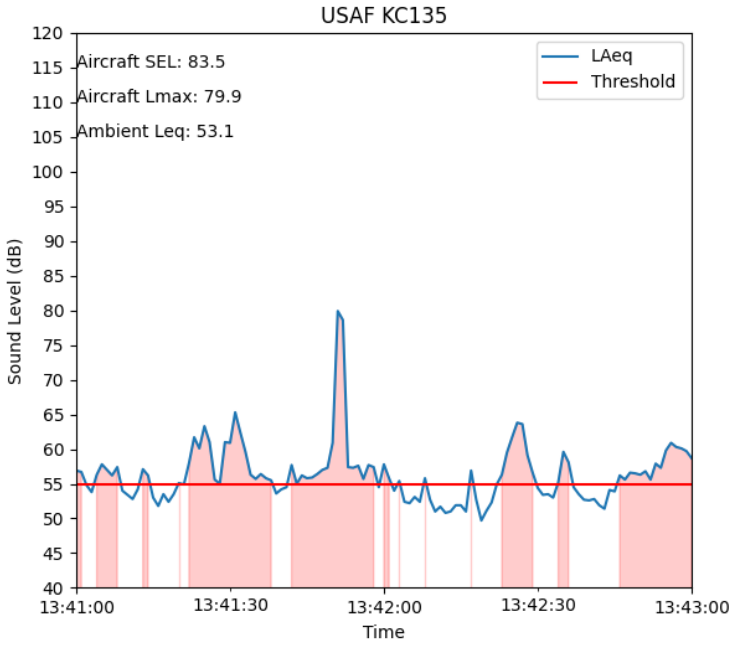

USN F35C
Aircraft SEL: 120.7
Aircraft Lmax: 116.6
Ambient Leq: 55.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:34
12:36
12:38
12:40
12:42
12:44
12:46
12:48

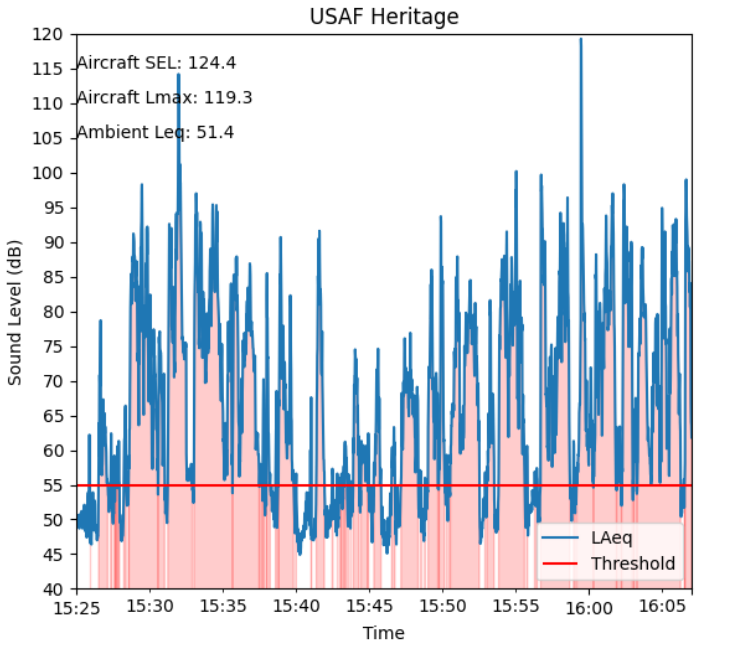

Michael Goulian
Aircraft SEL: 95.9
Aircraft Lmax: 81.6
Ambient Leq: 51.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:52
12:54
12:56
12:58
13:00
13:02


FedEx B757
Aircraft SEL: 99.4
Aircraft Lmax: 92.4
Ambient Leq: 51.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:03
13:04
13:05
13:06
13:07
13:08
13:09
13:10
13:11

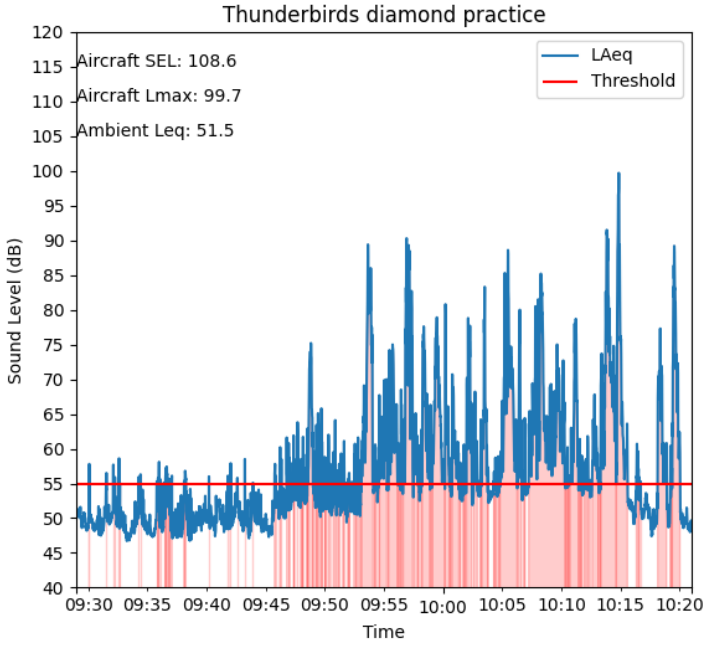

USN Growler
Aircraft SEL: 115.2
Aircraft Lmax: 106.8
Ambient Leq: 52.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:10
13:12
13:14
13:16
13:18
13:20

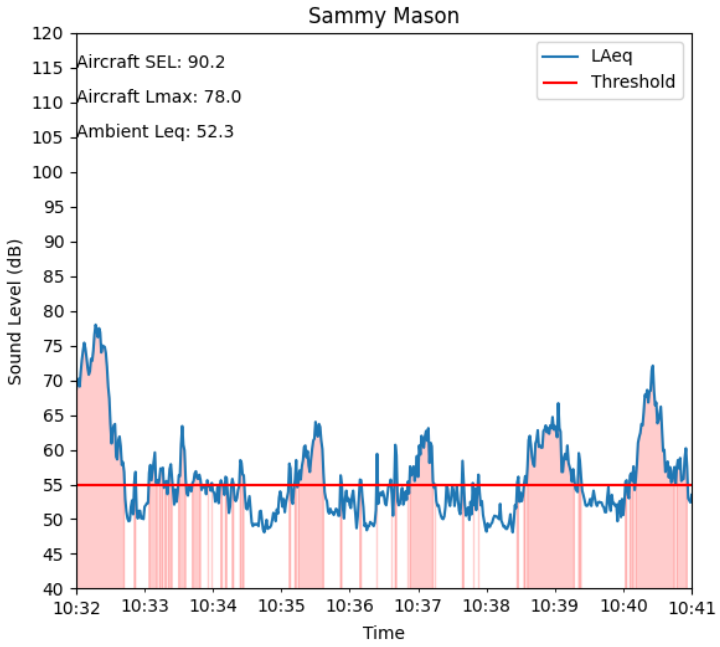

USAF F15
Aircraft SEL: 102.4
Aircraft Lmax: 94.1
Ambient Leq: 53.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:34:00
13:34:30
13:35:00
13:35:30
13:36:00
13:36:30
13:37:00

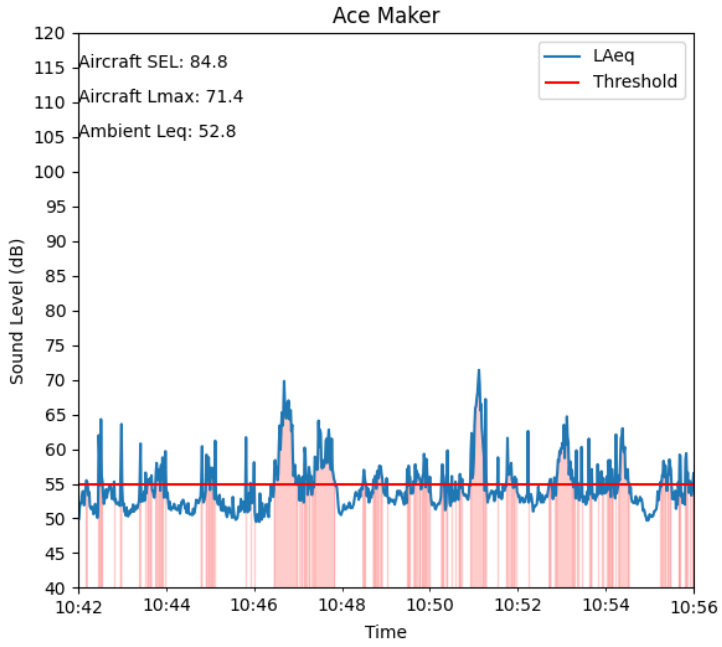

USAF KC135
Aircraft SEL: 83.5
Aircraft Lmax: 79.9
Ambient Leq: 53.1
LAeq
Threshold
Sound Level (dB)
Time
13:41:00
13:41:30
13:42:00
13:42:30
13:43:00

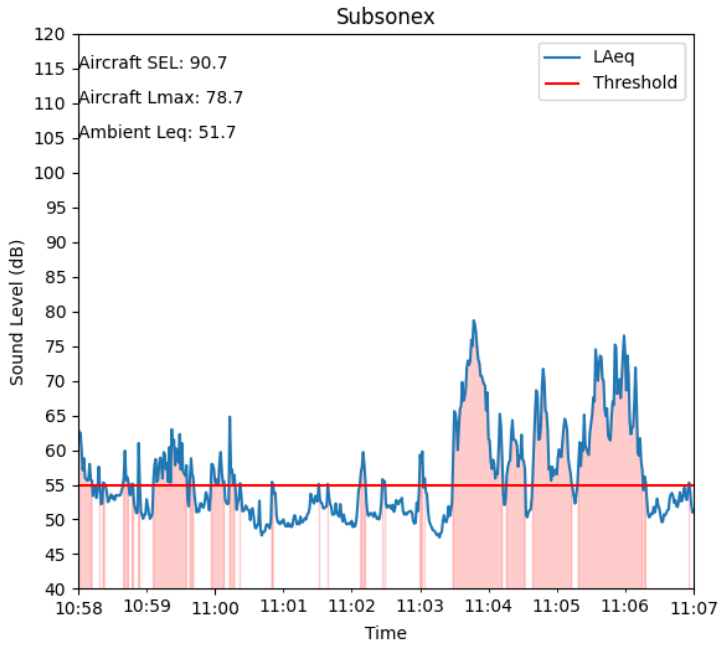

USAF Heritage
Aircraft SEL: 124.4
Aircraft Lmax: 119.3
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
15:25
15:30
15:35
15:40
15:45
15:50
15:55
16:00
16:05

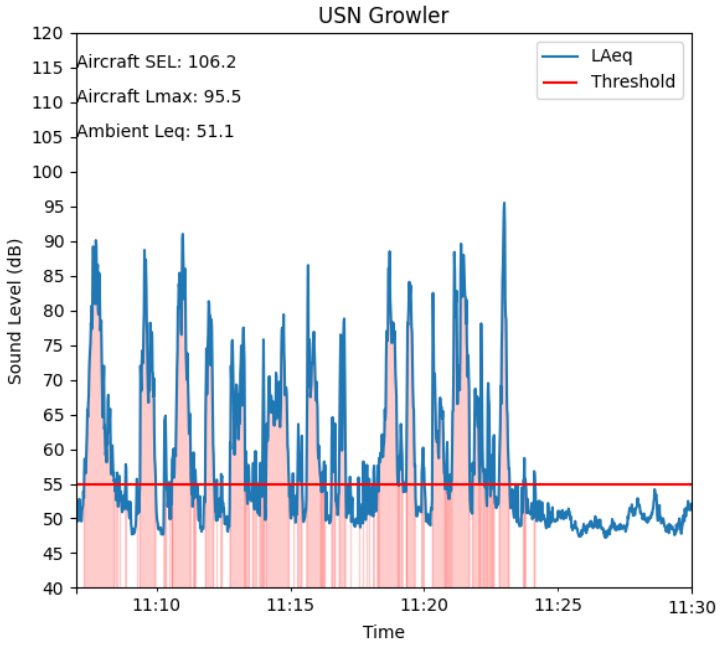
Site M7 – Huntington Beach City Hall

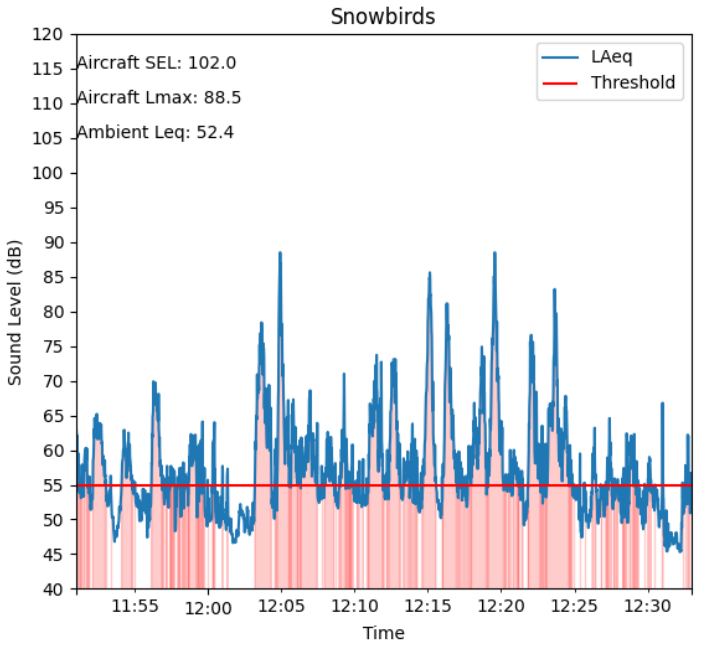


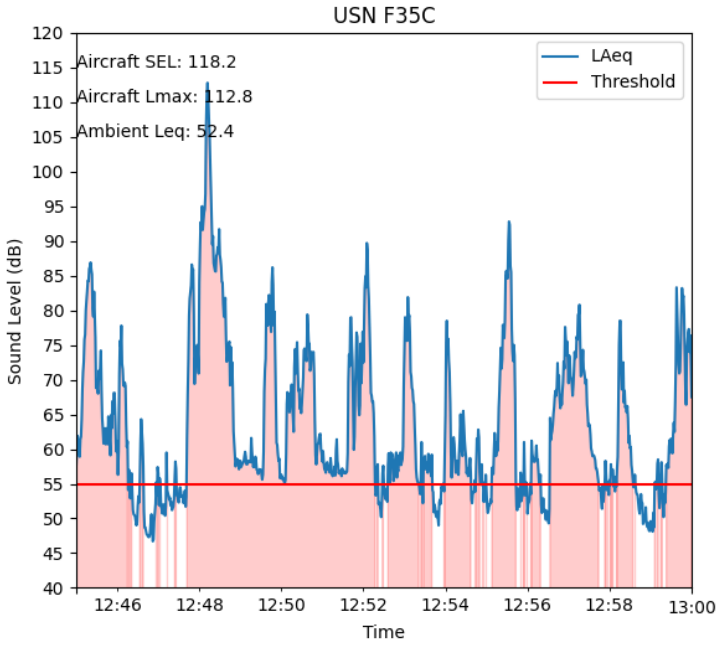


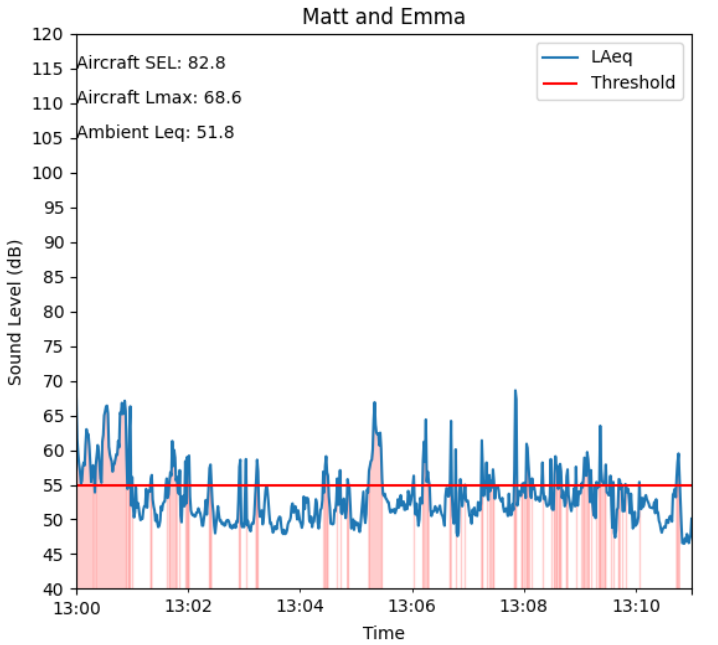

Ace Maker
Aircraft SEL: 84.8
Aircraft Lmax: 71.4
Ambient Leq: 52.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:42
10:44
10:46
10:48
10:50
10:52
10:54
10:56

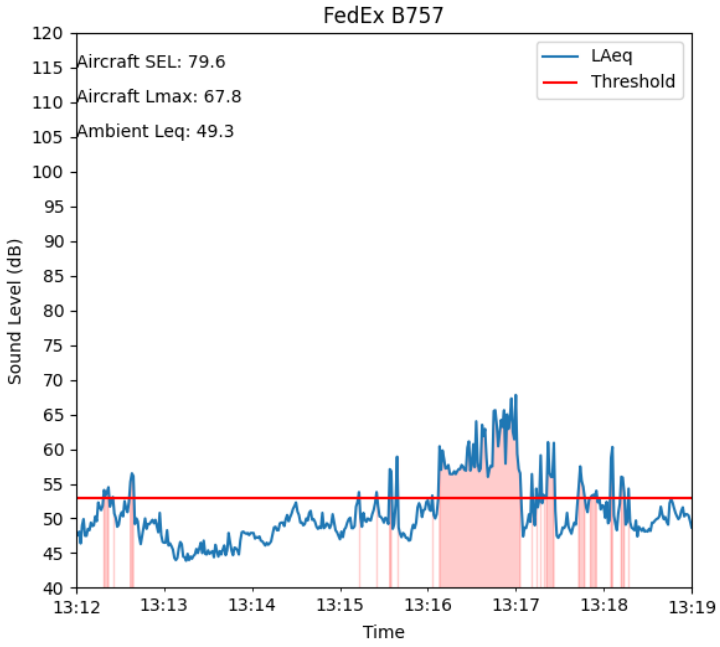

Subsonex
Aircraft SEL: 90.7
Aircraft Lmax: 78.7
Ambient Leq: 51.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:58
10:59
11:00
11:01
11:02
11:03
11:04
11:05
11:06
11:07

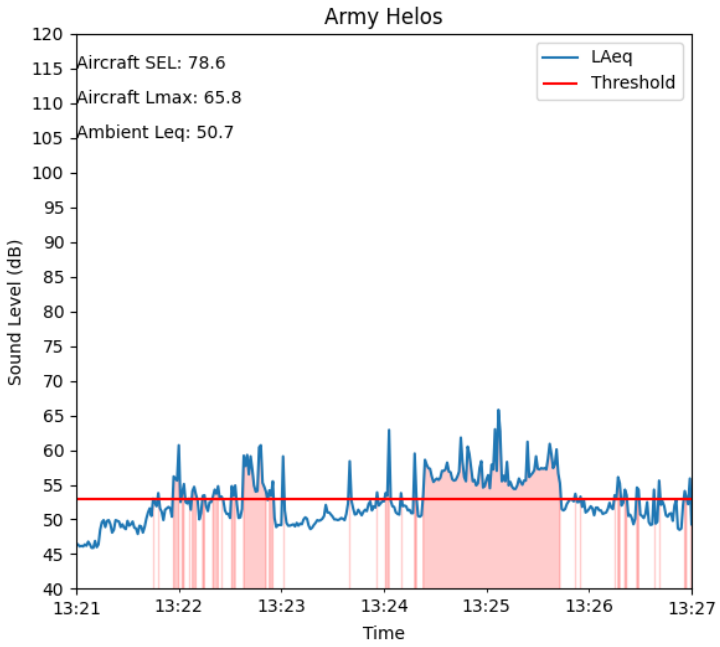

USN Growler
Aircraft SEL: 106.2
Aircraft Lmax: 95.5
Ambient Leq: 51.1
LAeq
Threshold
Sound Level (dB)
Time
11:10
11:15
11:20
11:25
11:30


Snowbirds
Aircraft SEL: 102.0
Aircraft Lmax: 88.5
Ambient Leq: 52.4
LAeq
Threshold
Sound Level (dB)
Time
11:55
12:00
12:05
12:10
12:15
12:20
12:25
12:30


USN F35C
Aircraft SEL: 118.2
Aircraft Lmax: 112.8
Ambient Leq: 52.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:46
12:48
12:50
12:52
12:54
12:56
12:58
13:00


Matt and Emma
Aircraft SEL: 82.8
Aircraft Lmax: 68.6
Ambient Leq: 51.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:00
13:02
13:04
13:06
13:08
13:10


FedEx B757
Aircraft SEL: 79.6
Aircraft Lmax: 67.8
Ambient Leq: 49.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:12
13:13
13:14
13:15
13:16
13:17
13:18
13:19


Army Helos
Aircraft SEL: 78.6
Aircraft Lmax: 65.8
Ambient Leq: 50.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:21
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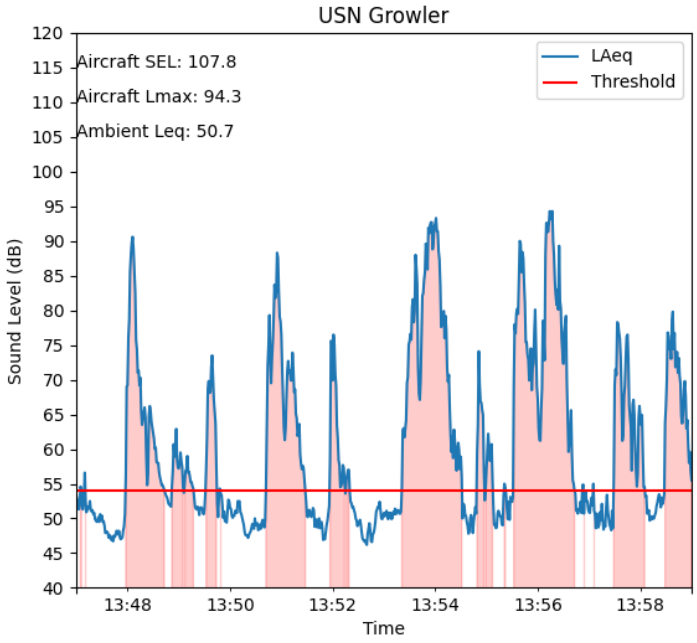
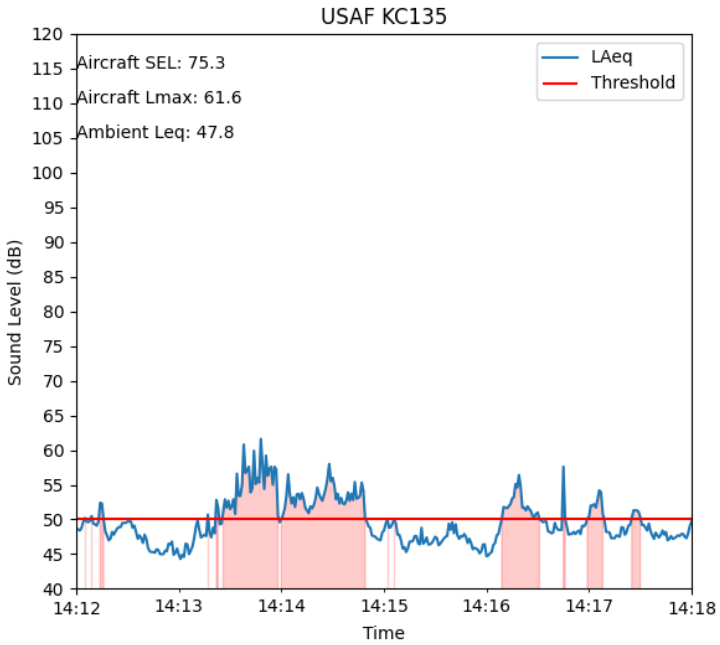
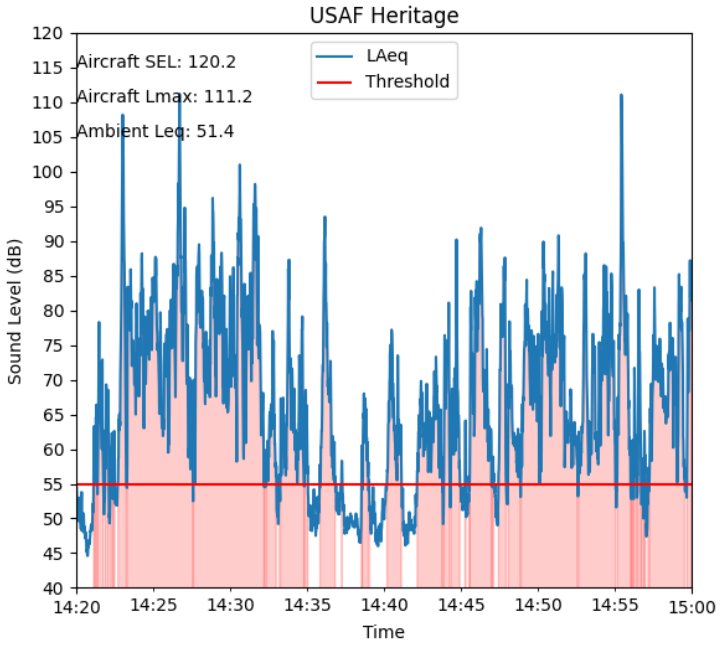
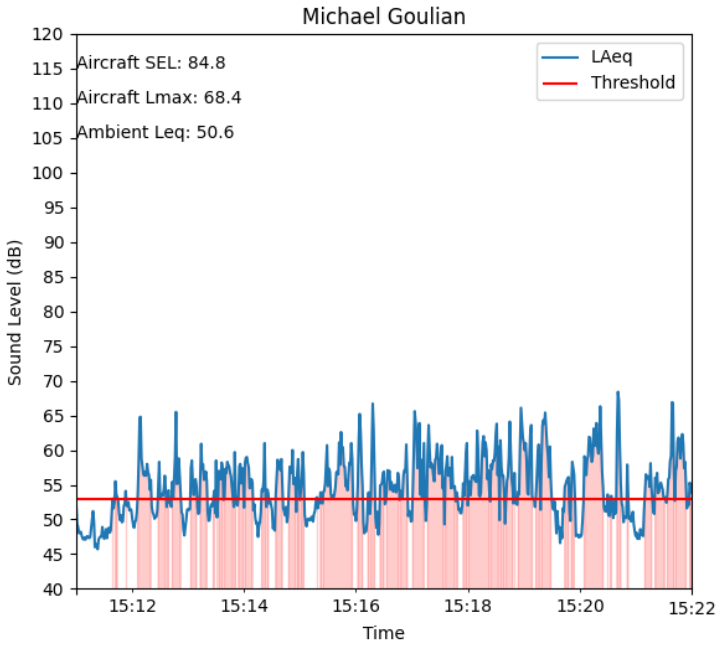
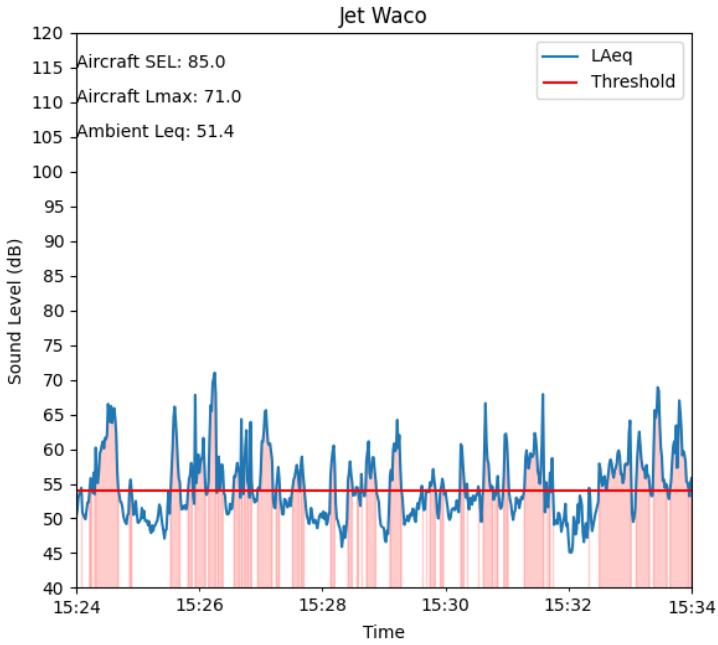
13:25
13:26
13:27

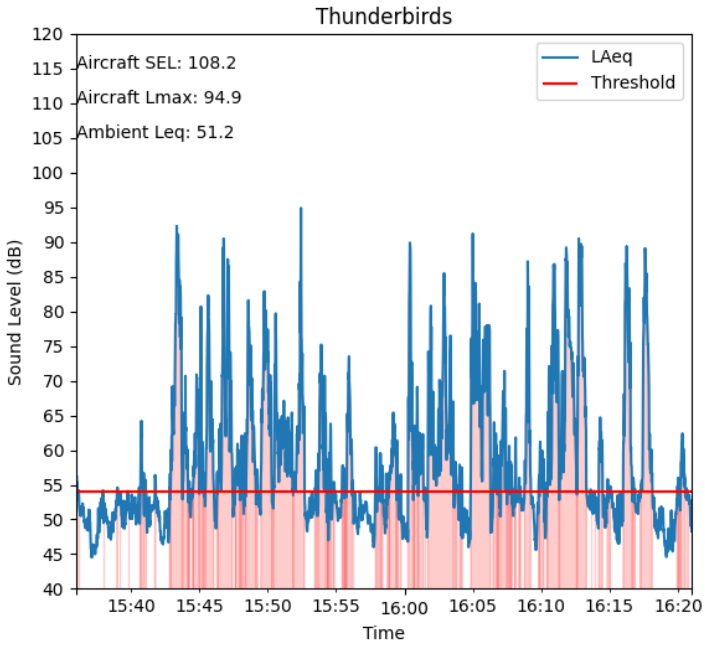

USN Growler
Aircraft SEL: 107.8
Aircraft Lmax: 94.3
Ambient Leq: 50.7
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:48
13:50
13:52
13:54
13:56
13:58


USAF KC135
Aircraft SEL: 75.3
Aircraft Lmax: 61.6
Ambient Leq: 47.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:12
14:13
14:14
14:15
14:16
14:17
14:18

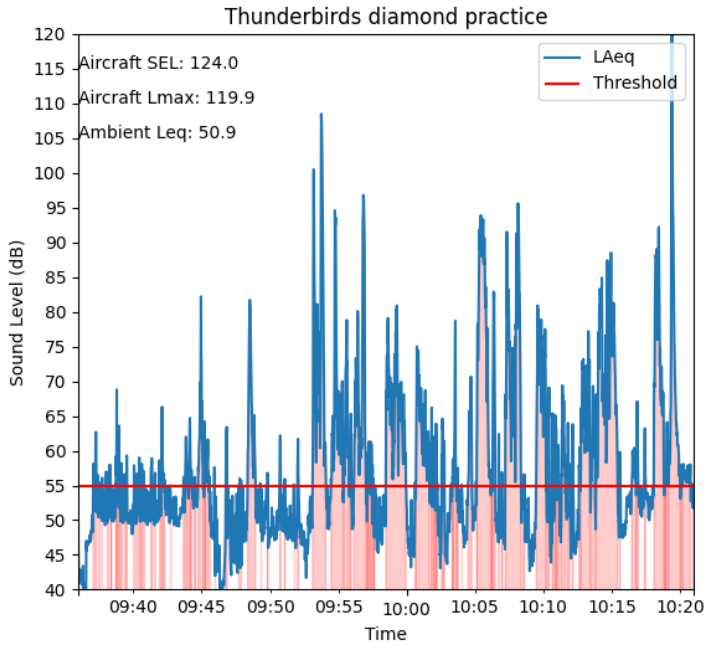

USAF Heritage
Aircraft SEL: 120.2
Aircraft Lmax: 111.2
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:20
14:25
14:30
14:35
14:40
14:45
14:50
14:55
15:00

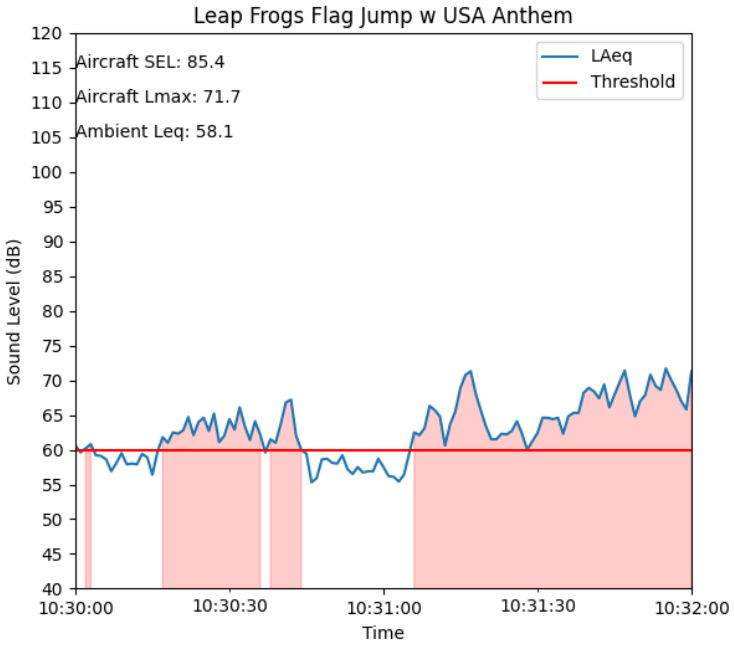

Michael Goulian
Aircraft SEL: 84.8
Aircraft Lmax: 68.4
Ambient Leq: 50.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:12
15:14
15:16
15:18
15:20
15:22


Jet Waco
Aircraft SEL: 85.0
Aircraft Lmax: 71.0
Ambient Leq: 51.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:24
15:26
15:28
15:30
15:32
15:34

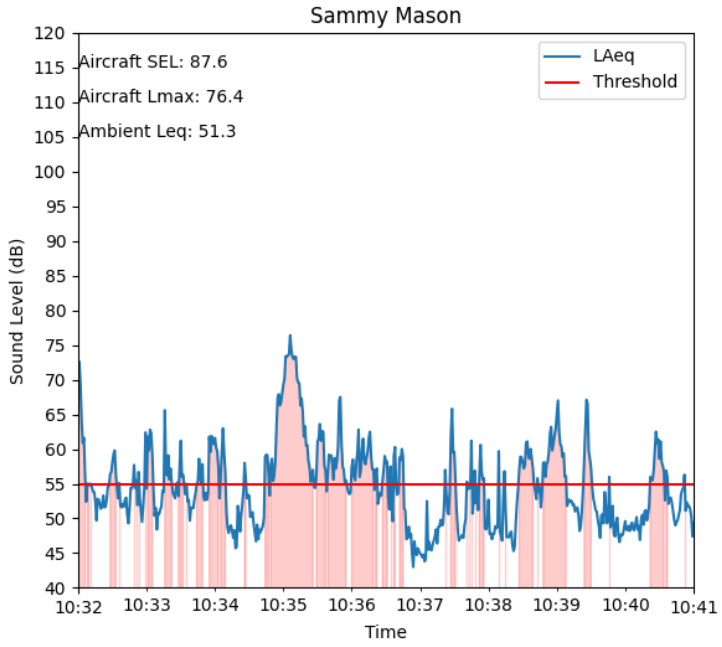

Thunderbirds
Aircraft SEL: 108.2
Aircraft Lmax: 94.9
Ambient Leq: 51.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:40
15:45
15:50
15:55
16:00
16:05
16:10
16:15
16:20

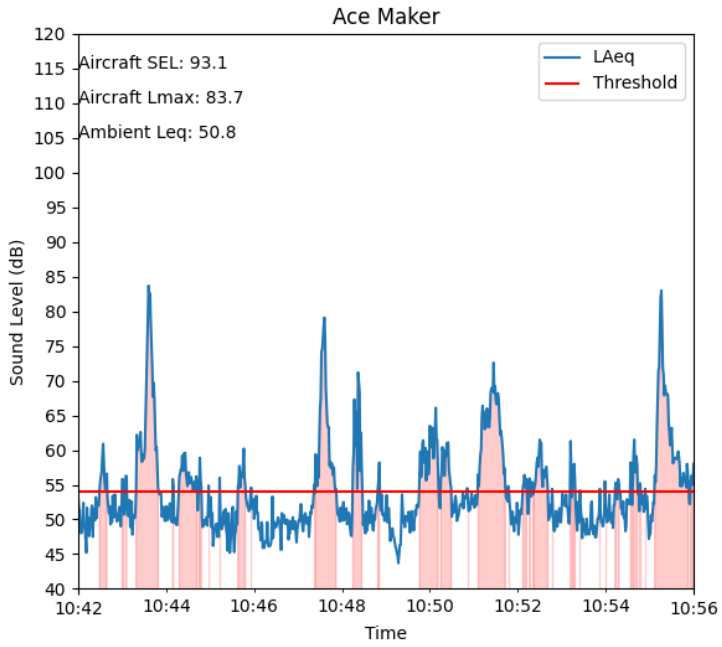
Site M9 – Peterson Elementary School

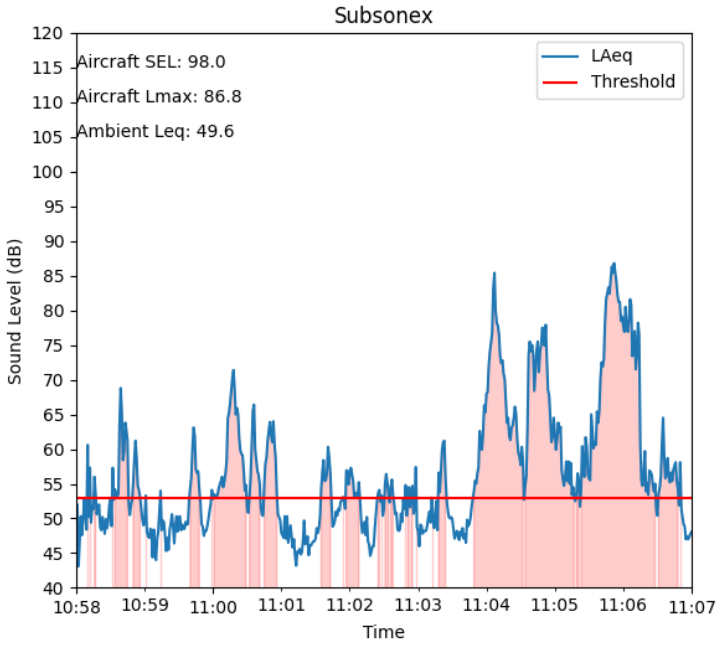


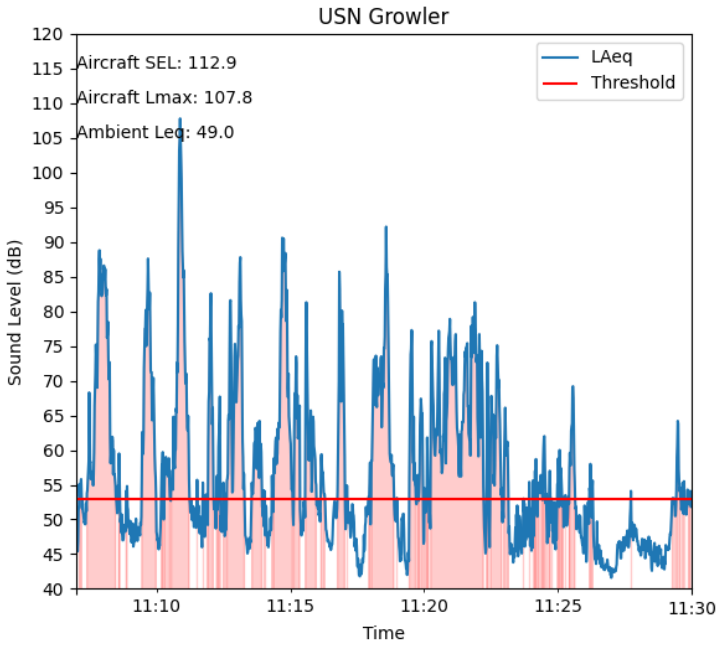


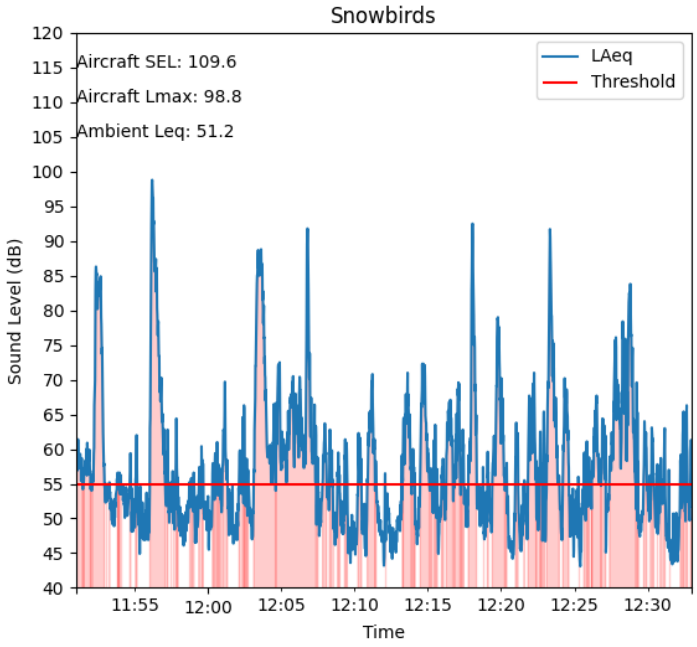
3

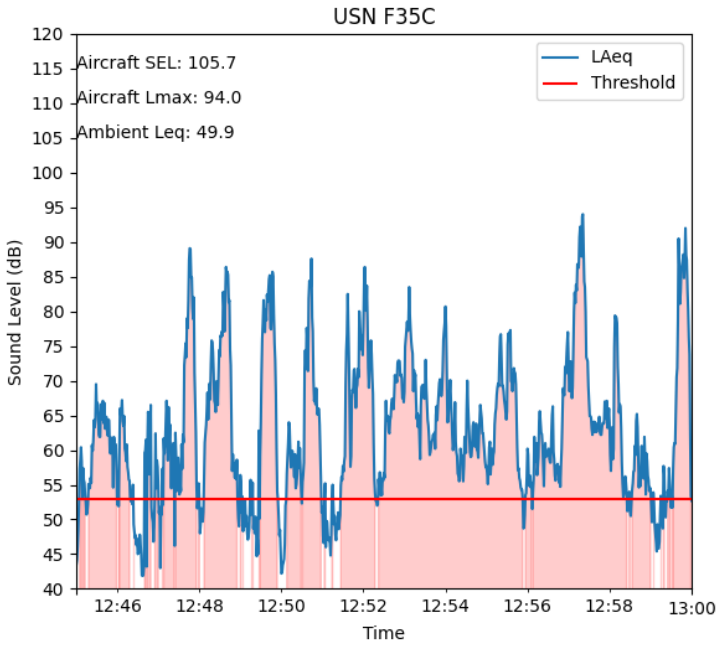

Sammy Mason
Aircraft SEL: 87.6
Aircraft Lmax: 76.4
Ambient Leq: 51.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:32
10:33
10:34
10:35
10:36
10:37
10:38
10:39
10:40
10:41

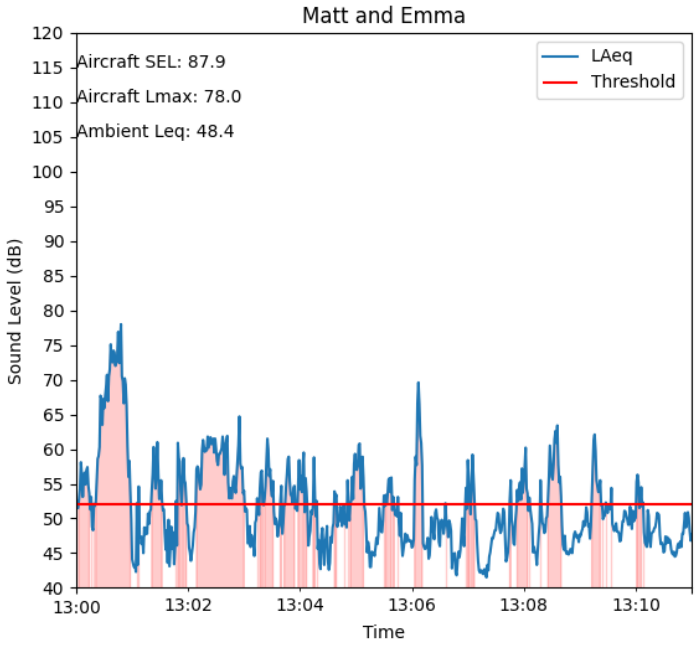

Ace Maker
Aircraft SEL: 93.1
Aircraft Lmax: 83.7
Ambient Leq: 50.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:42
10:44
10:46
10:48
10:50
10:52
10:54
10:56

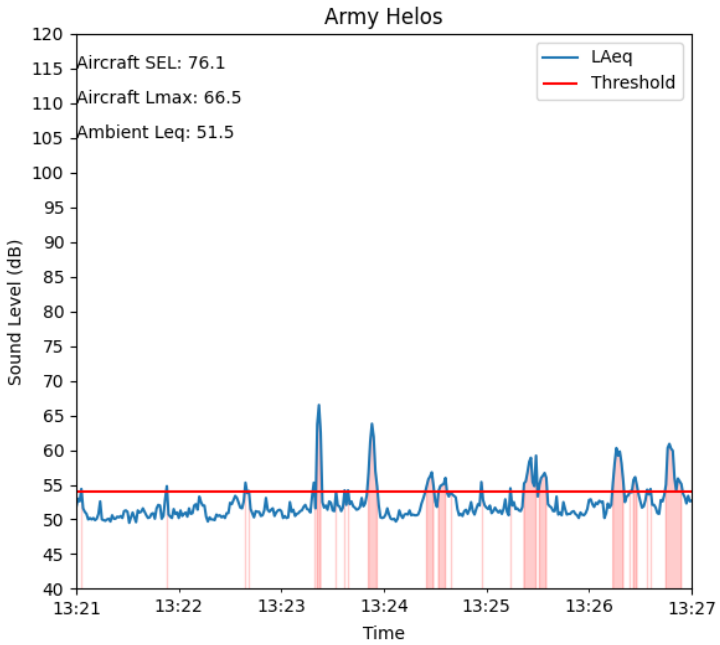

Subsonex
Aircraft SEL: 98.0
Aircraft Lmax: 86.8
Ambient Leq: 49.6
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
10:58
10:59
11:00
11:01
11:02
11:03
11:04
11:05
11:06
11:07

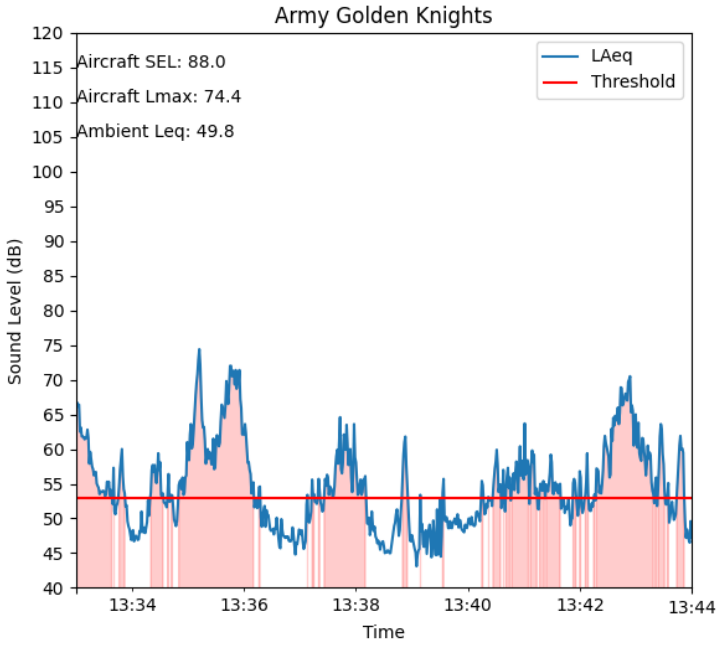

USN Growler
Aircraft SEL: 112.9
Aircraft Lmax: 107.8
Ambient Leq: 49.0
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:10
11:15
11:20
11:25
11:30

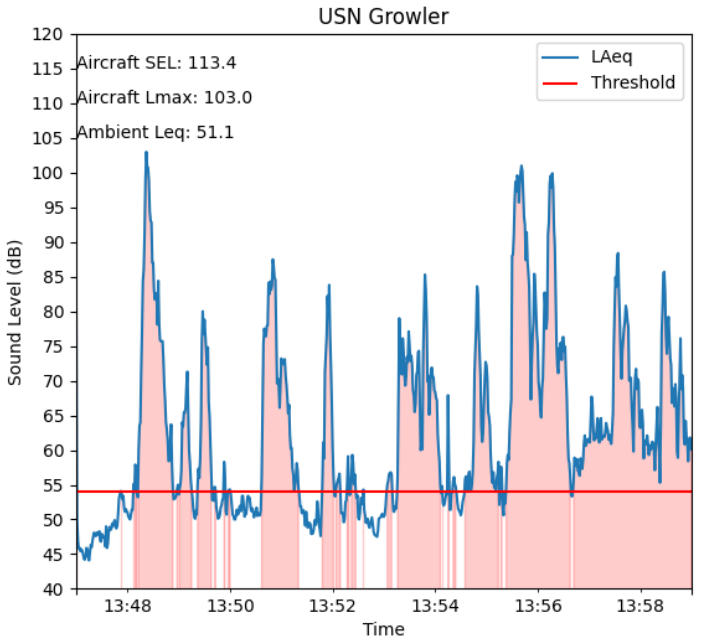

Snowbirds
Aircraft SEL: 109.6
Aircraft Lmax: 98.8
Ambient Leq: 51.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
11:55
12:00
12:05
12:10
12:15
12:20
12:25
12:30

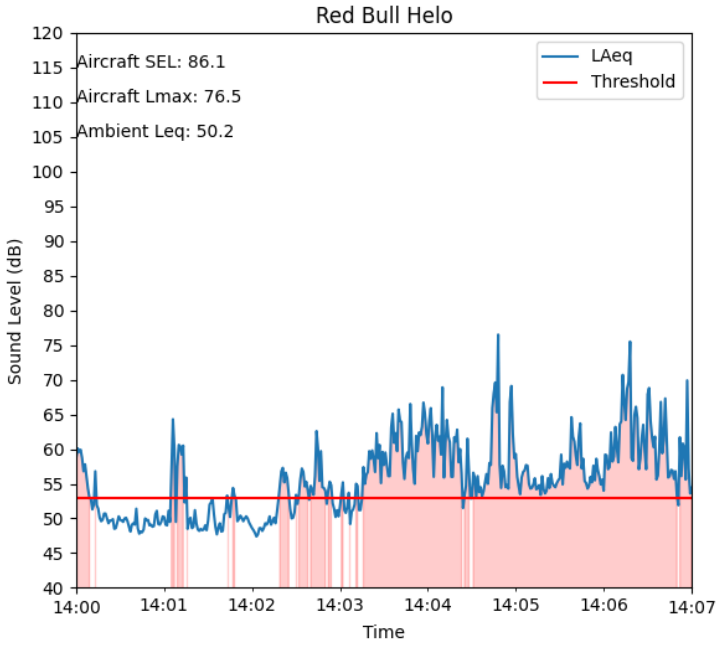

USN F35C
Aircraft SEL: 105.7
Aircraft Lmax: 94.0
Ambient Leq: 49.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
12:46
12:48
12:50
12:52
12:54
12:56
12:58
13:00

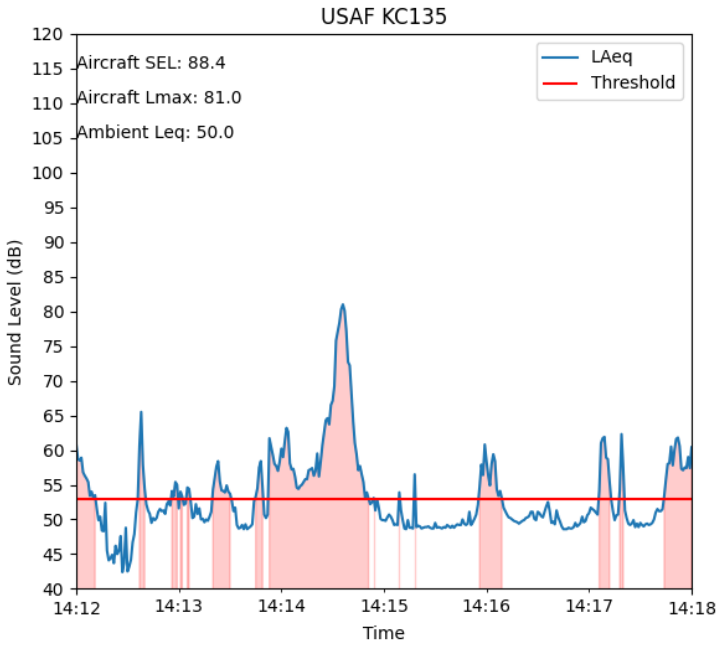

Matt and Emma
Aircraft SEL: 87.9
Aircraft Lmax: 78.0
Ambient Leq: 48.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:00
13:02
13:04
13:06
13:08
13:10

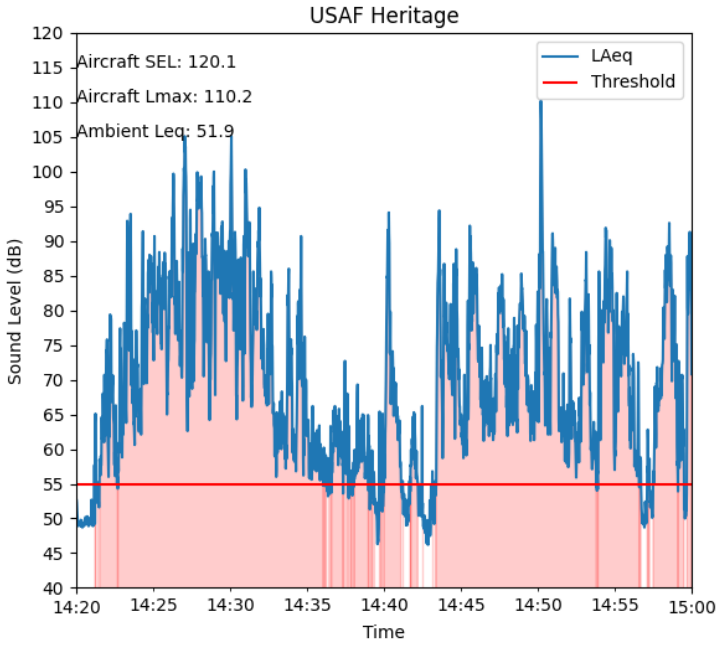

Army Helos
Aircraft SEL: 76.1
Aircraft Lmax: 66.5
Ambient Leq: 51.5
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:21
13:22
13:23
13:24
13:25
13:26
13:27

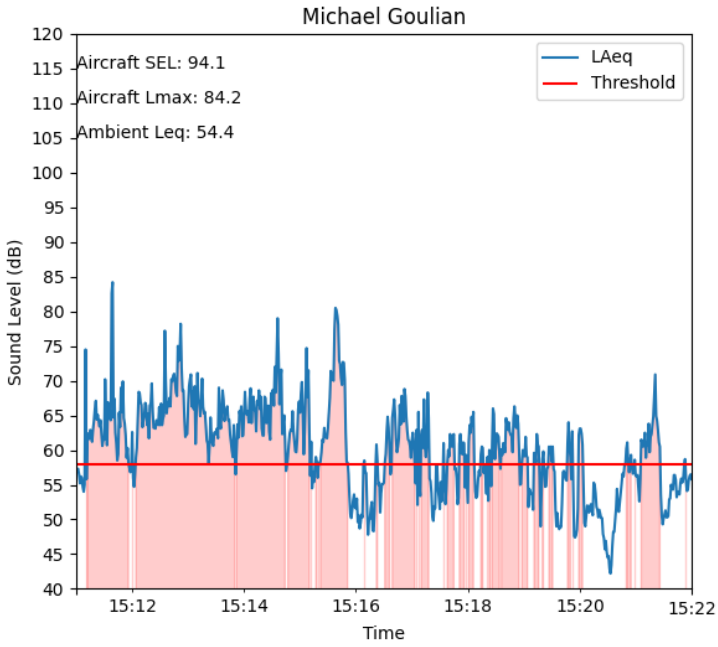

Army Golden Knights
Aircraft SEL: 88.0
Aircraft Lmax: 74.4
Ambient Leq: 49.8
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:34
13:36
13:38
13:40
13:42
13:44

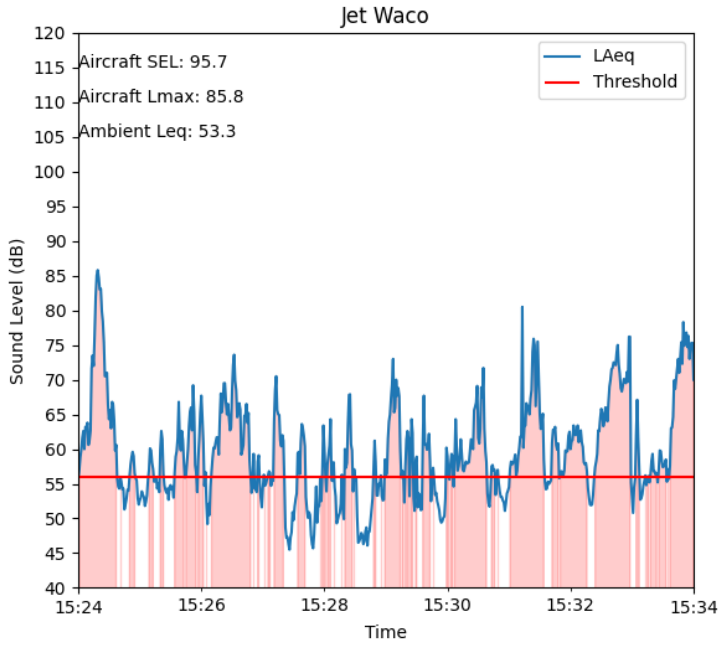

USN Growler
Aircraft SEL: 113.4
Aircraft Lmax: 103.0
Ambient Leq: 51.1
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
13:48
13:50
13:52
13:54
13:56
13:58

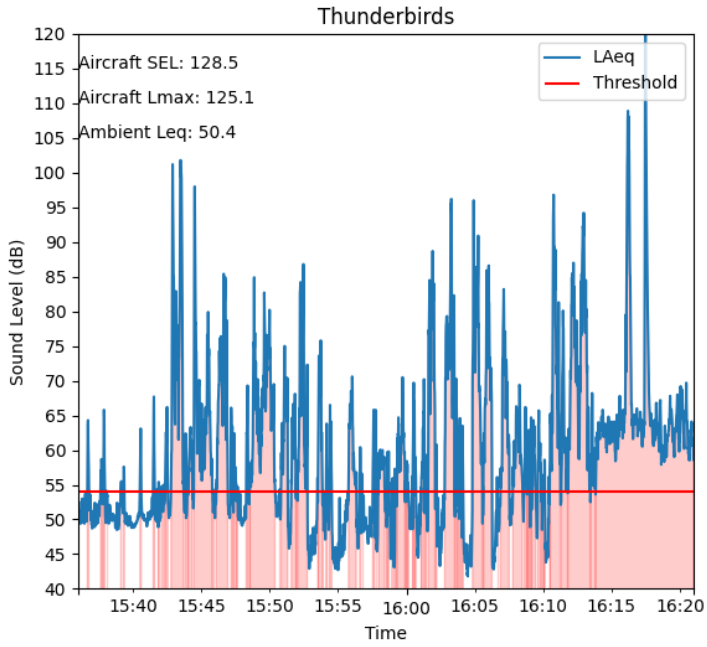

Red Bull Helo
Aircraft SEL: 86.1
Aircraft Lmax: 76.5
Ambient Leq: 50.2
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:00
14:01
14:02
14:03
14:04
14:05
14:06
14:07


USAF KC135
Aircraft SEL: 88.4
Aircraft Lmax: 81.0
Ambient Leq: 50.0
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:12
14:13
14:14
14:15
14:16
14:17
14:18


USAF Heritage
Aircraft SEL: 120.1
Aircraft Lmax: 110.2
Ambient Leq: 51.9
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
14:20
14:25
14:30
14:35
14:40
14:45
14:50
14:55
15:00


Michael Goulian
Aircraft SEL: 94.1
Aircraft Lmax: 84.2
Ambient Leq: 54.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:12
15:14
15:16
15:18
15:20
15:22


Jet Waco
Aircraft SEL: 95.7
Aircraft Lmax: 85.8
Ambient Leq: 53.3
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:24
15:26
15:28
15:30
15:32
15:34


Thunderbirds
Aircraft SEL: 128.5
Aircraft Lmax: 125.1
Ambient Leq: 50.4
LAeq
Threshold
Sound Level (dB)
Time
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
15:40
15:45
15:50
15:55
16:00
16:05
16:10
16:15
16:20

Appendix B – Calibration Certificates

Calibration Certificate

Certificate Number 2023001643

Customer:

The Modal Shop
10310 AeroHub Boulevard
Cincinnati, OH 45215, United States

Model Number	831		***Procedure Number***	D0001.8378	
Serial Number	0003221		***Technician***	Jacob Cannon	
Test Results	**Pass**		***Calibration Date***	8 Feb 2023	
Initial Condition	AS RECEIVED same as shipped		***Calibration Due***		
			Temperature	23.88 °C	± 0.25 °C
Description	Larson Davis Model 831 Class 1 Sound Level Meter Firmware Revision: 2.403		***Humidity***	49 %RH	± 2.0 %RH
			Static Pressure	86.85 kPa	± 0.13 kPa

Evaluation Method Tested electrically using Larson Davis PRM831 S/N 029590 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1
IEC 61260:2001 Class 1	ANSI S1.11 (R2009) Class 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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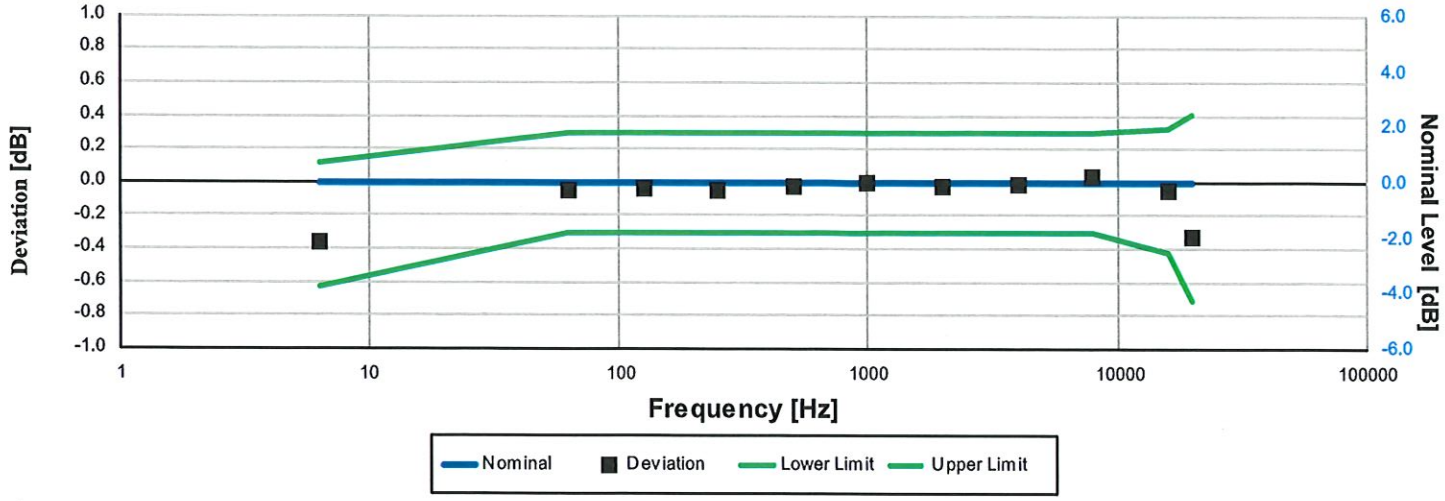
Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev S, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa; Reference Range: 0 dB gain

Standards Used			
Description	**Cal Date**	**Cal Due**	**Cal Standard**
Hart Scientific 2626-H Temperature Probe	2021-08-25	2023-02-25	006798
SRS DS360 Ultra Low Distortion Generator	2022-09-02	2023-09-02	007167

Z-weight Filter Response

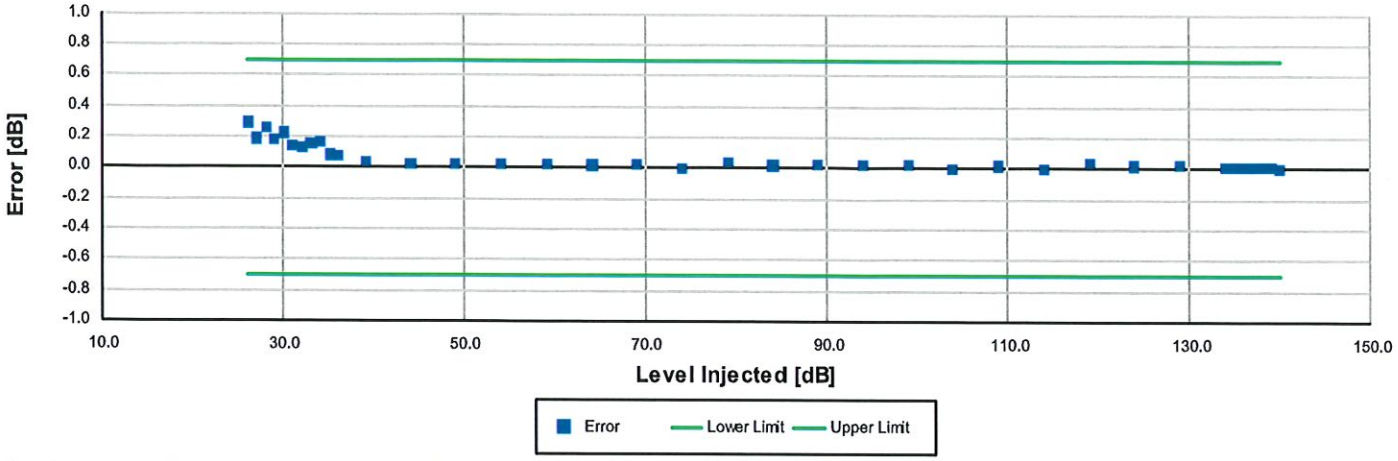


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.36	-0.36	-0.63	0.12	0.15	Pass
63.10	-0.05	-0.05	-0.30	0.30	0.15	Pass
125.89	-0.04	-0.03	-0.30	0.30	0.15	Pass
251.19	-0.06	-0.05	-0.30	0.30	0.15	Pass
501.19	-0.03	-0.02	-0.30	0.30	0.15	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.15	Pass
1,995.26	-0.03	-0.03	-0.30	0.30	0.15	Pass
3,981.07	-0.01	-0.01	-0.30	0.30	0.15	Pass
7,943.28	0.04	0.04	-0.30	0.30	0.15	Pass
15,848.93	-0.06	-0.06	-0.42	0.32	0.15	Pass
19,952.62	-0.33	-0.33	-0.71	0.41	0.15	Pass

-- End of measurement results--

A-weighted 0 dB Gain Broadband Log Linearity: 8,000.00 Hz



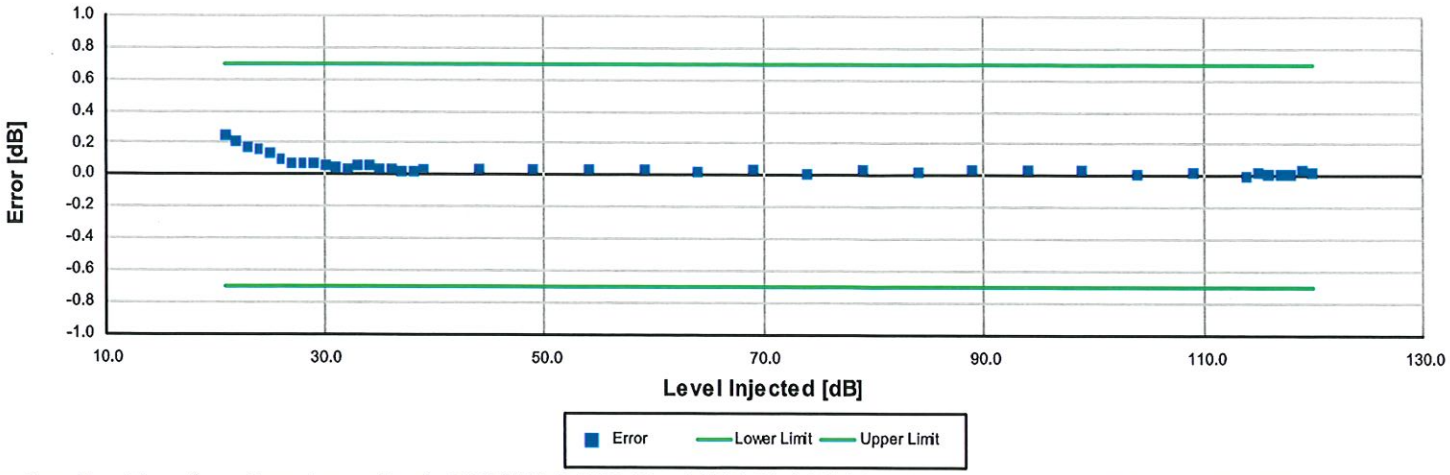
Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
26.00	0.29	-0.70	0.70	0.16	Pass
27.00	0.19	-0.70	0.70	0.16	Pass
28.00	0.26	-0.70	0.70	0.16	Pass
29.00	0.18	-0.70	0.70	0.16	Pass
30.00	0.23	-0.70	0.70	0.16	Pass
31.00	0.14	-0.70	0.70	0.16	Pass
32.00	0.12	-0.70	0.70	0.16	Pass
33.00	0.16	-0.70	0.70	0.16	Pass
34.00	0.17	-0.70	0.70	0.16	Pass
35.00	0.08	-0.70	0.70	0.16	Pass
36.00	0.07	-0.70	0.70	0.16	Pass
39.00	0.04	-0.70	0.70	0.16	Pass
44.00	0.02	-0.70	0.70	0.16	Pass
49.00	0.03	-0.70	0.70	0.16	Pass
54.00	0.03	-0.70	0.70	0.16	Pass
59.00	0.03	-0.70	0.70	0.16	Pass
64.00	0.02	-0.70	0.70	0.16	Pass
69.00	0.03	-0.70	0.70	0.16	Pass
74.00	0.00	-0.70	0.70	0.16	Pass
79.00	0.03	-0.70	0.70	0.16	Pass
84.00	0.02	-0.70	0.70	0.16	Pass
89.00	0.02	-0.70	0.70	0.16	Pass
94.00	0.02	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	0.00	-0.70	0.70	0.15	Pass
109.00	0.02	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.03	-0.70	0.70	0.15	Pass
124.00	0.02	-0.70	0.70	0.15	Pass
129.00	0.02	-0.70	0.70	0.15	Pass
134.00	0.01	-0.70	0.70	0.15	Pass
135.00	0.01	-0.70	0.70	0.15	Pass
136.00	0.02	-0.70	0.70	0.15	Pass
137.00	0.01	-0.70	0.70	0.15	Pass
138.00	0.01	-0.70	0.70	0.15	Pass
139.00	0.01	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
140.00	0.00	-0.70	0.70	0.15	Pass

-- End of measurement results--

A-weighted 20 dB Gain Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
21.00	0.25	-0.70	0.70	0.16	Pass
22.00	0.21	-0.70	0.70	0.16	Pass
23.00	0.18	-0.70	0.70	0.16	Pass
24.00	0.16	-0.70	0.70	0.16	Pass
25.00	0.14	-0.70	0.70	0.16	Pass
26.00	0.10	-0.70	0.70	0.16	Pass
27.00	0.08	-0.70	0.70	0.16	Pass
28.00	0.07	-0.70	0.70	0.16	Pass
29.00	0.07	-0.70	0.70	0.16	Pass
30.00	0.06	-0.70	0.70	0.16	Pass
31.00	0.05	-0.70	0.70	0.16	Pass
32.00	0.04	-0.70	0.70	0.16	Pass
33.00	0.06	-0.70	0.70	0.16	Pass
34.00	0.06	-0.70	0.70	0.16	Pass
35.00	0.04	-0.70	0.70	0.16	Pass
36.00	0.03	-0.70	0.70	0.16	Pass
37.00	0.03	-0.70	0.70	0.16	Pass
38.00	0.03	-0.70	0.70	0.16	Pass
39.00	0.04	-0.70	0.70	0.16	Pass
44.00	0.03	-0.70	0.70	0.16	Pass
49.00	0.03	-0.70	0.70	0.16	Pass
54.00	0.03	-0.70	0.70	0.16	Pass
59.00	0.03	-0.70	0.70	0.16	Pass
64.00	0.02	-0.70	0.70	0.16	Pass
69.00	0.03	-0.70	0.70	0.16	Pass
74.00	0.01	-0.70	0.70	0.16	Pass
79.00	0.04	-0.70	0.70	0.16	Pass
84.00	0.03	-0.70	0.70	0.16	Pass
89.00	0.04	-0.70	0.70	0.16	Pass
94.00	0.04	-0.70	0.70	0.16	Pass
99.00	0.04	-0.70	0.70	0.16	Pass
104.00	0.02	-0.70	0.70	0.15	Pass
109.00	0.02	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
115.00	0.03	-0.70	0.70	0.15	Pass
116.00	0.01	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
117.00	0.01	-0.70	0.70	0.15	Pass
118.00	0.01	-0.70	0.70	0.15	Pass
119.00	0.03	-0.70	0.70	0.15	Pass
120.00	0.02	-0.70	0.70	0.15	Pass

-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
139.00	40	Negative Pulse	136.00	134.52	136.52	0.15	Pass
		Positive Pulse	136.00	134.52	136.52	0.15	Pass
	30	Negative Pulse	135.06	134.52	136.52	0.15	Pass
		Positive Pulse	135.08	134.52	136.52	0.15	Pass

-- End of measurement results--

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.12	± 0.50	0.16 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	-0.24	± 1.50	0.15 ‡	Pass
108.00	3	-0.12	± 0.50	0.18 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.16	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	-0.24	± 1.50	0.15 ‡	Pass
108.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	-0.16	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	94.00	93.89	94.09	0.15	Pass
0 dB Gain, Linearity	29.19	28.29	29.69	0.16	Pass
20 dB Gain	94.00	93.89	94.09	0.15	Pass
20 dB Gain, Linearity	24.12	23.29	24.69	0.16	Pass
OBA Low Range	93.99	93.89	94.09	0.15	Pass
OBA Normal Range	93.99	93.20	94.80	0.15	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	7.14	15.00	Pass
C-weight Noise Floor	12.14	17.30	Pass
Z-weight Noise Floor	21.78	24.50	Pass

-- End of measurement results--

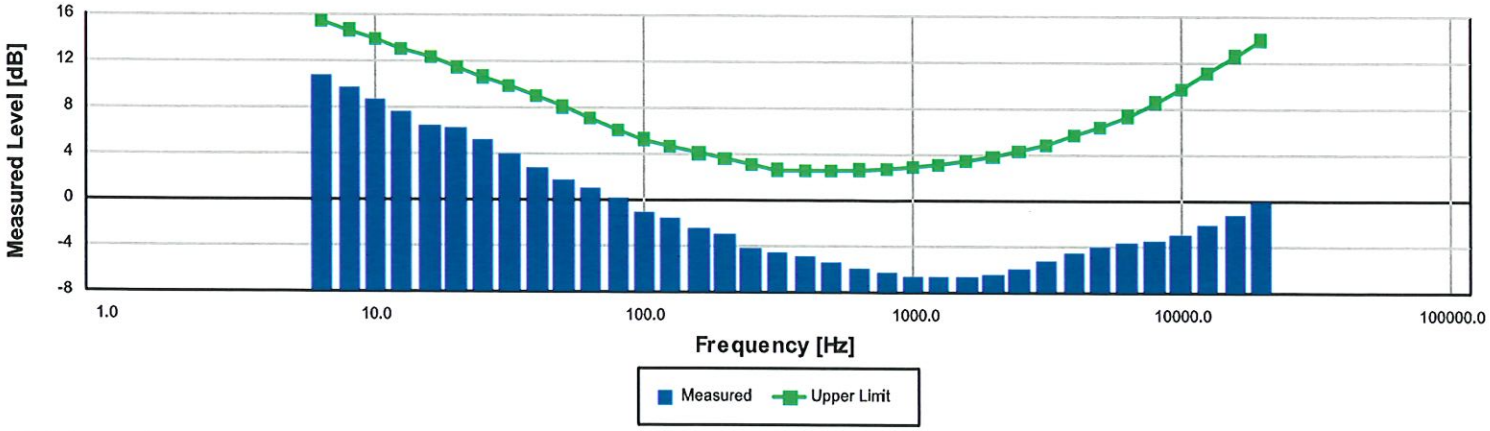
Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	137.53	137.20	138.80	0.15	Pass
THD	-73.64		-60.00	0.01 ‡	Pass
THD+N	-66.30		-60.00	0.01 ‡	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range and 20 dB gain.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	10.81	15.50	Pass
8.00	9.66	14.70	Pass
10.00	8.69	13.90	Pass
12.50	7.67	13.10	Pass
16.00	6.52	12.30	Pass
20.00	6.20	11.50	Pass
25.00	5.28	10.70	Pass
31.50	3.96	9.90	Pass
40.00	2.72	9.10	Pass
50.00	1.67	8.10	Pass
63.00	1.08	7.10	Pass
80.00	0.17	6.10	Pass
100.00	-1.02	5.30	Pass
125.00	-1.59	4.70	Pass
160.00	-2.49	4.10	Pass
200.00	-2.91	3.60	Pass
250.00	-4.10	3.10	Pass
315.00	-4.44	2.70	Pass
400.00	-4.81	2.60	Pass
500.00	-5.46	2.60	Pass
630.00	-5.96	2.70	Pass
800.00	-6.29	2.80	Pass
1,000.00	-6.53	3.00	Pass
1,250.00	-6.57	3.20	Pass
1,600.00	-6.52	3.50	Pass
2,000.00	-6.36	3.80	Pass
2,500.00	-5.89	4.30	Pass
3,150.00	-5.27	4.90	Pass
4,000.00	-4.48	5.70	Pass
5,000.00	-3.96	6.40	Pass
6,300.00	-3.72	7.40	Pass
8,000.00	-3.40	8.60	Pass
10,000.00	-2.89	9.80	Pass
12,500.00	-2.14	11.20	Pass
16,000.00	-1.21	12.60	Pass
20,000.00	-0.04	14.00	Pass

-- End of measurement results--

-- End of Report--

Signatory: *Jacob Cannon*

LARSON DAVIS – A PCB DIVISION
1681 West 820 North
Provo, UT 84601, United States
716-684-0001

ACCREDITED CERT #3622.01

LARSON DAVIS A PCB DIVISION

Calibration Certificate

Certificate Number 2023001628
Customer:
The Modal Shop
10310 AeroHub Boulevard
Cincinnati, OH 45215, United States

Model Number	831	***Procedure Number***	D0001.8378		
Serial Number	0003558	***Technician***	Jacob Cannon		
Test Results	**Pass**	***Calibration Date***	8 Feb 2023		
Initial Condition	AS RECEIVED same as shipped	***Calibration Due***			
Description	Larson Davis Model 831 Class 1 Sound Level Meter Firmware Revision: 2.403	***Temperature***	23.77	°C	± 0.25 °C
		Humidity	49.1	%RH	± 2.0 %RH
		Static Pressure	86.92	kPa	± 0.13 kPa

Evaluation Method Tested electrically using Larson Davis PRM831 S/N 029590 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1
IEC 61260:2001 Class 1	ANSI S1.11 (R2009) Class 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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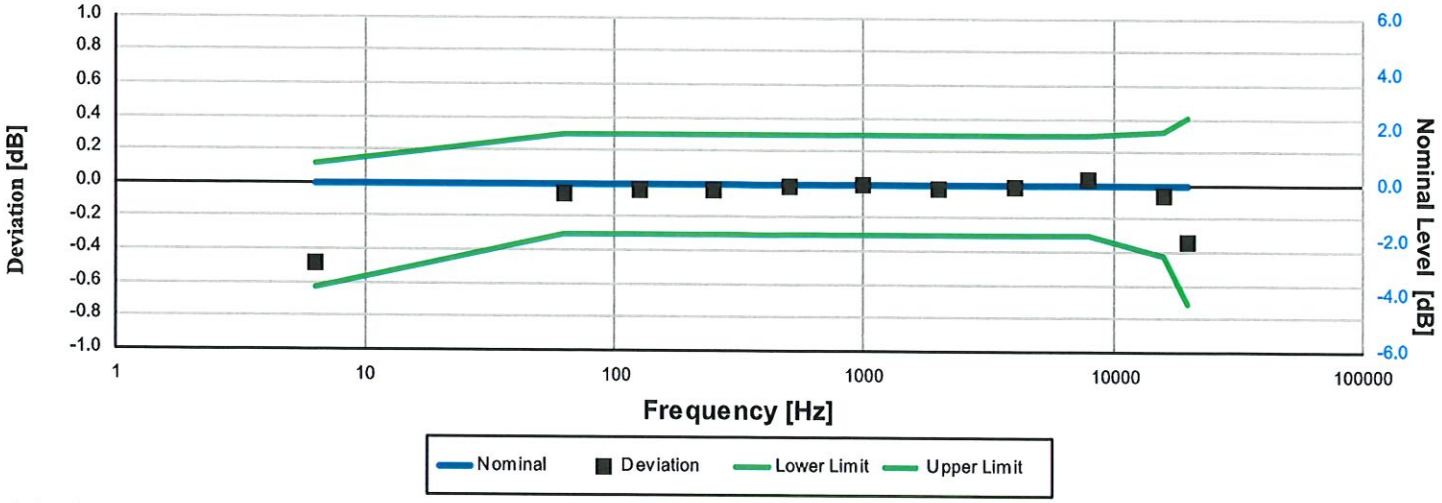
Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev S, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa; Reference Range: 0 dB gain

Standards Used			
Description	**Cal Date**	**Cal Due**	**Cal Standard**
Hart Scientific 2626-H Temperature Probe	2021-08-25	2023-02-25	006798
SRS DS360 Ultra Low Distortion Generator	2022-09-02	2023-09-02	007167

Z-weight Filter Response

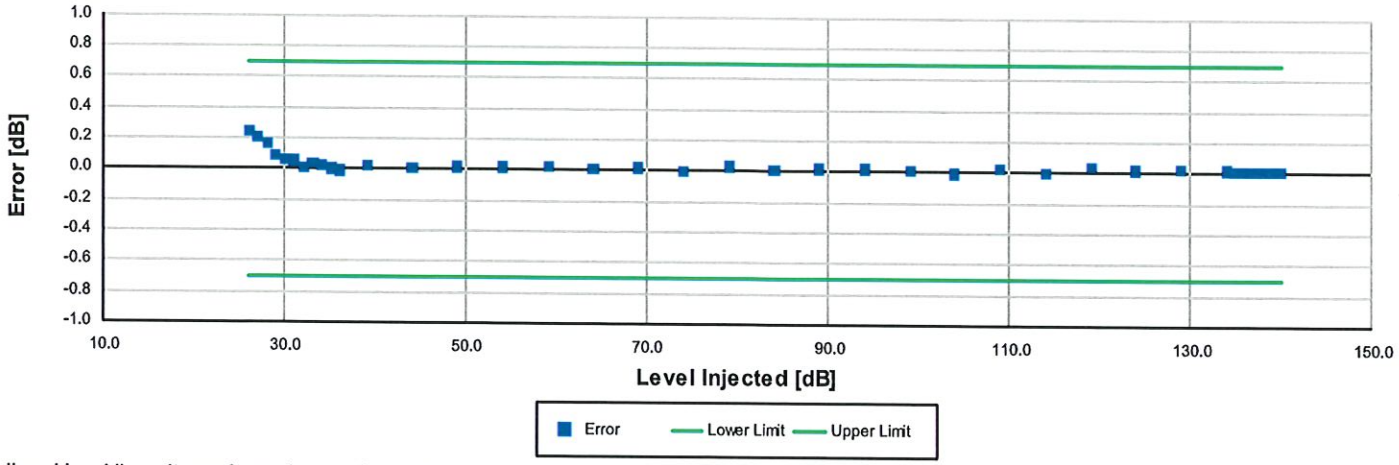


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.48	-0.48	-0.63	0.12	0.15	Pass
63.10	-0.06	-0.06	-0.30	0.30	0.15	Pass
125.89	-0.03	-0.03	-0.30	0.30	0.15	Pass
251.19	-0.04	-0.04	-0.30	0.30	0.15	Pass
501.19	-0.02	-0.02	-0.30	0.30	0.15	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.15	Pass
1,995.26	-0.03	-0.03	-0.30	0.30	0.15	Pass
3,981.07	-0.01	-0.01	-0.30	0.30	0.15	Pass
7,943.28	0.04	0.04	-0.30	0.30	0.15	Pass
15,848.93	-0.06	-0.06	-0.42	0.32	0.15	Pass
19,952.62	-0.34	-0.34	-0.71	0.41	0.15	Pass

-- End of measurement results--

A-weighted 0 dB Gain Broadband Log Linearity: 8,000.00 Hz



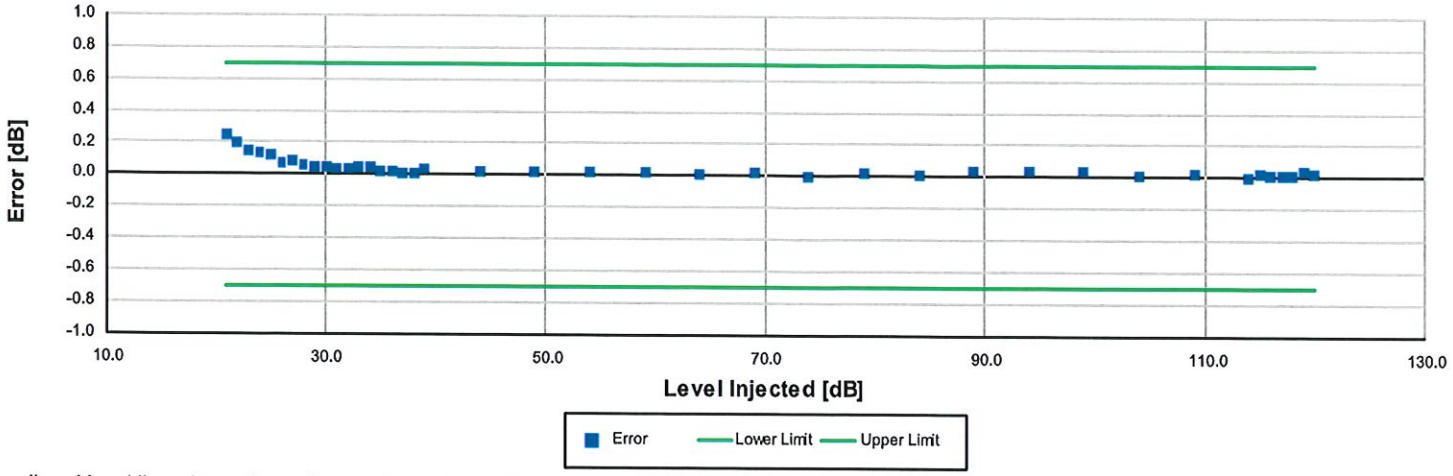
Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
26.00	0.25	-0.70	0.70	0.16	Pass
27.00	0.20	-0.70	0.70	0.16	Pass
28.00	0.17	-0.70	0.70	0.16	Pass
29.00	0.09	-0.70	0.70	0.16	Pass
30.00	0.07	-0.70	0.70	0.16	Pass
31.00	0.06	-0.70	0.70	0.16	Pass
32.00	0.01	-0.70	0.70	0.16	Pass
33.00	0.03	-0.70	0.70	0.16	Pass
34.00	0.03	-0.70	0.70	0.16	Pass
35.00	0.01	-0.70	0.70	0.16	Pass
36.00	-0.01	-0.70	0.70	0.16	Pass
39.00	0.03	-0.70	0.70	0.16	Pass
44.00	0.01	-0.70	0.70	0.16	Pass
49.00	0.02	-0.70	0.70	0.16	Pass
54.00	0.02	-0.70	0.70	0.16	Pass
59.00	0.02	-0.70	0.70	0.16	Pass
64.00	0.01	-0.70	0.70	0.16	Pass
69.00	0.02	-0.70	0.70	0.16	Pass
74.00	0.00	-0.70	0.70	0.16	Pass
79.00	0.03	-0.70	0.70	0.16	Pass
84.00	0.02	-0.70	0.70	0.16	Pass
89.00	0.02	-0.70	0.70	0.16	Pass
94.00	0.02	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	-0.01	-0.70	0.70	0.15	Pass
109.00	0.02	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.03	-0.70	0.70	0.15	Pass
124.00	0.02	-0.70	0.70	0.15	Pass
129.00	0.02	-0.70	0.70	0.15	Pass
134.00	0.02	-0.70	0.70	0.15	Pass
135.00	0.01	-0.70	0.70	0.15	Pass
136.00	0.02	-0.70	0.70	0.15	Pass
137.00	0.01	-0.70	0.70	0.15	Pass
138.00	0.01	-0.70	0.70	0.15	Pass
139.00	0.02	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
140.00	0.01	-0.70	0.70	0.15	Pass

-- End of measurement results--

A-weighted 20 dB Gain Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
21.00	0.25	-0.70	0.70	0.16	Pass
22.00	0.20	-0.70	0.70	0.16	Pass
23.00	0.15	-0.70	0.70	0.16	Pass
24.00	0.13	-0.70	0.70	0.16	Pass
25.00	0.12	-0.70	0.70	0.16	Pass
26.00	0.08	-0.70	0.70	0.16	Pass
27.00	0.09	-0.70	0.70	0.16	Pass
28.00	0.06	-0.70	0.70	0.16	Pass
29.00	0.05	-0.70	0.70	0.16	Pass
30.00	0.05	-0.70	0.70	0.16	Pass
31.00	0.04	-0.70	0.70	0.16	Pass
32.00	0.03	-0.70	0.70	0.16	Pass
33.00	0.05	-0.70	0.70	0.16	Pass
34.00	0.05	-0.70	0.70	0.16	Pass
35.00	0.03	-0.70	0.70	0.16	Pass
36.00	0.02	-0.70	0.70	0.16	Pass
37.00	0.01	-0.70	0.70	0.16	Pass
38.00	0.01	-0.70	0.70	0.16	Pass
39.00	0.04	-0.70	0.70	0.16	Pass
44.00	0.02	-0.70	0.70	0.16	Pass
49.00	0.02	-0.70	0.70	0.16	Pass
54.00	0.02	-0.70	0.70	0.16	Pass
59.00	0.02	-0.70	0.70	0.16	Pass
64.00	0.01	-0.70	0.70	0.16	Pass
69.00	0.02	-0.70	0.70	0.16	Pass
74.00	-0.01	-0.70	0.70	0.16	Pass
79.00	0.03	-0.70	0.70	0.16	Pass
84.00	0.01	-0.70	0.70	0.16	Pass
89.00	0.04	-0.70	0.70	0.16	Pass
94.00	0.04	-0.70	0.70	0.16	Pass
99.00	0.04	-0.70	0.70	0.16	Pass
104.00	0.01	-0.70	0.70	0.15	Pass
109.00	0.02	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
115.00	0.03	-0.70	0.70	0.15	Pass
116.00	0.01	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
117.00	0.01	-0.70	0.70	0.15	Pass
118.00	0.02	-0.70	0.70	0.15	Pass
119.00	0.03	-0.70	0.70	0.15	Pass
120.00	0.02	-0.70	0.70	0.15	Pass

-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
139.00	40	Negative Pulse	136.00	134.52	136.52	0.15	Pass
		Positive Pulse	136.00	134.52	136.52	0.15	Pass
	30	Negative Pulse	135.07	134.52	136.52	0.15	Pass
		Positive Pulse	135.07	134.52	136.52	0.15	Pass

-- End of measurement results--

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.12	± 0.50	0.16 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.16	± 1.50	0.15 ‡	Pass
108.00	3	-0.12	± 0.50	0.18 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.25	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.11	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	-0.16	± 1.50	0.15 ‡	Pass
108.00	3	-0.11	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	-0.25	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	93.99	93.89	94.09	0.15	Pass
0 dB Gain, Linearity	29.14	28.29	29.69	0.16	Pass
20 dB Gain	94.00	93.89	94.09	0.15	Pass
20 dB Gain, Linearity	24.09	23.29	24.69	0.16	Pass
OBA Low Range	93.99	93.89	94.09	0.15	Pass
OBA Normal Range	93.99	93.20	94.80	0.15	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	7.24	15.00	Pass
C-weight Noise Floor	12.22	17.30	Pass
Z-weight Noise Floor	21.91	24.50	Pass

-- End of measurement results--

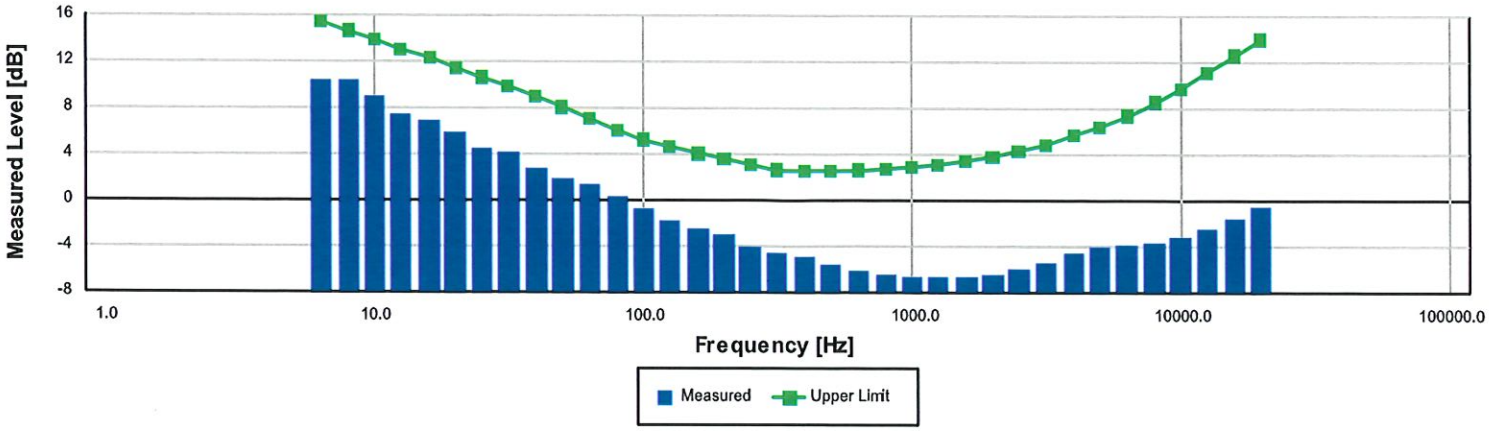
Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	137.53	137.20	138.80	0.15	Pass
THD	-74.12		-60.00	0.01 ‡	Pass
THD+N	-66.57		-60.00	0.01 ‡	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range and 20 dB gain.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	10.45	15.50	Pass
8.00	10.38	14.70	Pass
10.00	8.98	13.90	Pass
12.50	7.56	13.10	Pass
16.00	7.00	12.30	Pass
20.00	5.98	11.50	Pass
25.00	4.52	10.70	Pass
31.50	4.16	9.90	Pass
40.00	2.74	9.10	Pass
50.00	1.88	8.10	Pass
63.00	1.32	7.10	Pass
80.00	0.29	6.10	Pass
100.00	-0.76	5.30	Pass
125.00	-1.69	4.70	Pass
160.00	-2.44	4.10	Pass
200.00	-2.98	3.60	Pass
250.00	-3.97	3.10	Pass
315.00	-4.49	2.70	Pass
400.00	-4.91	2.60	Pass
500.00	-5.59	2.60	Pass
630.00	-6.12	2.70	Pass
800.00	-6.37	2.80	Pass
1,000.00	-6.51	3.00	Pass
1,250.00	-6.64	3.20	Pass
1,600.00	-6.58	3.50	Pass
2,000.00	-6.39	3.80	Pass
2,500.00	-5.91	4.30	Pass
3,150.00	-5.33	4.90	Pass
4,000.00	-4.54	5.70	Pass
5,000.00	-4.08	6.40	Pass
6,300.00	-3.84	7.40	Pass
8,000.00	-3.58	8.60	Pass
10,000.00	-3.07	9.80	Pass
12,500.00	-2.36	11.20	Pass
16,000.00	-1.54	12.60	Pass
20,000.00	-0.59	14.00	Pass

-- End of measurement results--

-- End of Report--

Signatory: *Jacob Cannon*

LARSON DAVIS – A PCB DIVISION
1681 West 820 North
Provo, UT 84601, United States
716-684-0001

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CERT #3622.01

LARSON DAVIS
A PCB DIVISION

THE MODAL SHOP
AN AMPHENOL COMPANY

10310 Aerohub Boulevard
Cincinnati, OH 45215
Ph: 513.351.9919
Fax: 513.458.2172
www.modalshop.com

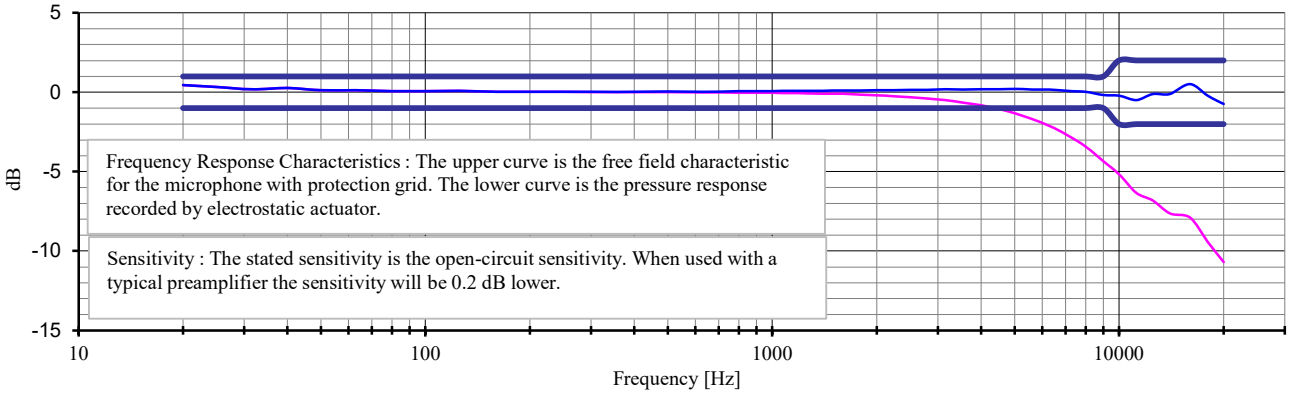
~Certificate of Calibration~

Manufacturer:	PCB	**Customer:**	TMS Rental
Model Number:	377B02	**Address:**	
Serial Number:	313622		
Asset ID:	71156	**Cal Date / Cal ID:**	Mar 21, 2023 17:10:38
Description:	Free-Field Microphone	**Due Date:**	

Sensitivity:	**251.29 Hz**	**1000 Hz**		**Temperature:**	75 (24)	°F (°C)
	-26.07	-26.11	dB re. 1V/Pa	**Humidity:**	25	%
	49.72	49.49	mV/Pa	**Ambient Pressure:**	1001	mbar

Reference Sens: In Tolerance
Freq. Response: In Tolerance

Polarization Voltage: 0 VDC



Traceability: The calibration is traceable through NIST Project A3214.
Notes: Calibration results relate only to the items calibrated.
This certificate may not be reproduced, except in full, without written permission.
This calibration is performed in compliance with ISO 9001, ISO 17025 and ANSI Z540.
Measurement uncertainty (250 Hz sensitivity calibration) at 95% confidence level: 0.30 dB
Calibrated per procedure PRD-P204.

User Note: As Found / As Left : In Tolerance

Frequency Response with reference to level at 251.29 Hz

Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)
20	0.45	**630**	0.03	**4500**	0.18		
25	0.33	**800**	0.07	**5000**	0.20		
31.5	0.19	**1000**	0.08	**5600**	0.18		
40	0.27	**1120**	0.09	**6300**	0.16		
50	0.13	**1250**	0.09	**7100**	0.08		
63	0.13	**1400**	0.10	**8000**	0.02		
80	0.07	**1600**	0.12	**9000**	-0.17		
100	0.07	**1800**	0.11	**10000**	-0.22		
125	0.08	**2000**	0.13	**11200**	-0.49		
160	0.03	**2240**	0.13	**12500**	-0.11		
200	0.04	**2500**	0.15	**14000**	-0.10		
250	0.02	**2800**	0.16	**16000**	0.51		
315	0.02	**3150**	0.18	**18000**	-0.22		
400	0.02	**3550**	0.17	**20000**	-0.74		
500	0.04	**4000**	0.18				

Technician: Michael Wardlow

Approval: Michael Wardlow

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	58093	2/28/2023	2/28/2024

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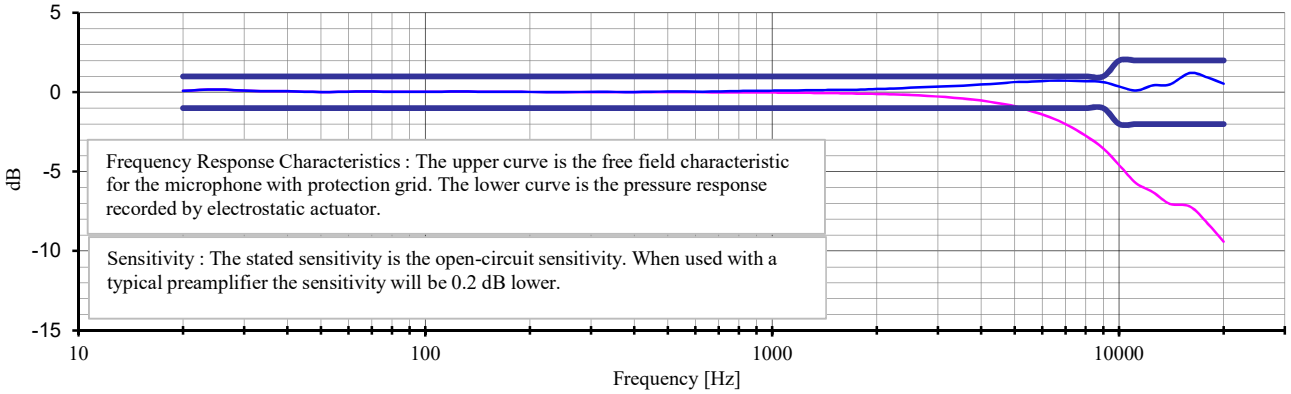
~Certificate of Calibration~

Manufacturer:	PCB	**Customer:**	TMS Rental
Model Number:	377B02	**Address:**	
Serial Number:	333454		
Asset ID:	84914	**Cal Date / Cal ID:**	Jan 18, 2023 13:37:53
Description:	Free-Field Microphone	**Due Date:**	

Sensitivity:	**251.29 Hz**	**1000 Hz**		**Temperature:**	74 (23)	°F (°C)
	-27.25	-27.27	dB re. 1V/Pa	**Humidity:**	35	%
	43.38	43.31	mV/Pa	**Ambient Pressure:**	994	mbar

Reference Sens: In Tolerance
Freq. Response: In Tolerance

Polarization Voltage: 0 VDC



Traceability: The calibration is traceable through NIST Project A2212.

Notes:
Calibration results relate only to the items calibrated.
This certificate may not be reproduced, except in full, without written permission.
This calibration is performed in compliance with ISO 9001, ISO 17025 and ANSI Z540.
Measurement uncertainty (250 Hz sensitivity calibration) at 95% confidence level: 0.30 dB
Calibrated per procedure PRD-P204.

User Note: As Found / As Left : In Tolerance

Frequency Response with reference to level at 251.29 Hz

Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)
20	0.08	**630**	0.04	**4500**	0.55		
25	0.18	**800**	0.08	**5000**	0.64		
31.5	0.08	**1000**	0.10	**5600**	0.67		
40	0.06	**1120**	0.11	**6300**	0.72		
50	0.02	**1250**	0.12	**7100**	0.73		
63	0.04	**1400**	0.14	**8000**	0.70		
80	0.04	**1600**	0.15	**9000**	0.64		
100	0.03	**1800**	0.17	**10000**	0.36		
125	0.05	**2000**	0.20	**11200**	0.11		
160	0.03	**2240**	0.23	**12500**	0.43		
200	0.02	**2500**	0.28	**14000**	0.50		
250	0.02	**2800**	0.33	**16000**	1.22		
315	0.02	**3150**	0.38	**18000**	0.92		
400	0.02	**3550**	0.42	**20000**	0.54		
500	0.04	**4000**	0.49				

Technician: Michael Wardlow

Approval: Michael Wardlow

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	6/16/2022	6/16/2023

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CALIBRATION CERT 2649.01

Calibration Certificate

Certificate Number 2023004875

Customer:

The Modal Shop
10310 AeroHub Boulevard
Cincinnati,OH 45215,United States

Model Number	831		***Procedure Number***	D0001.8378	
Serial Number	0002270		***Technician***	Jacob Cannon	
Test Results	**Pass**		***Calibration Date***	20 Apr 2023	
Initial Condition	AS RECEIVED same as shipped		***Calibration Due***		
Description	Larson Davis Model 831		***Temperature***	23.55 °C	± 0.25 °C
	Class 1 Sound Level Meter		***Humidity***	49.5 %RH	± 2.0 %RH
	Firmware Revision: 2.403		***Static Pressure***	86.74 kPa	± 0.13 kPa

Evaluation Method Tested electrically using Larson Davis PRM831 S/N 077393 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1
IEC 61260:2001 Class 1	ANSI S1.11 (R2009) Class 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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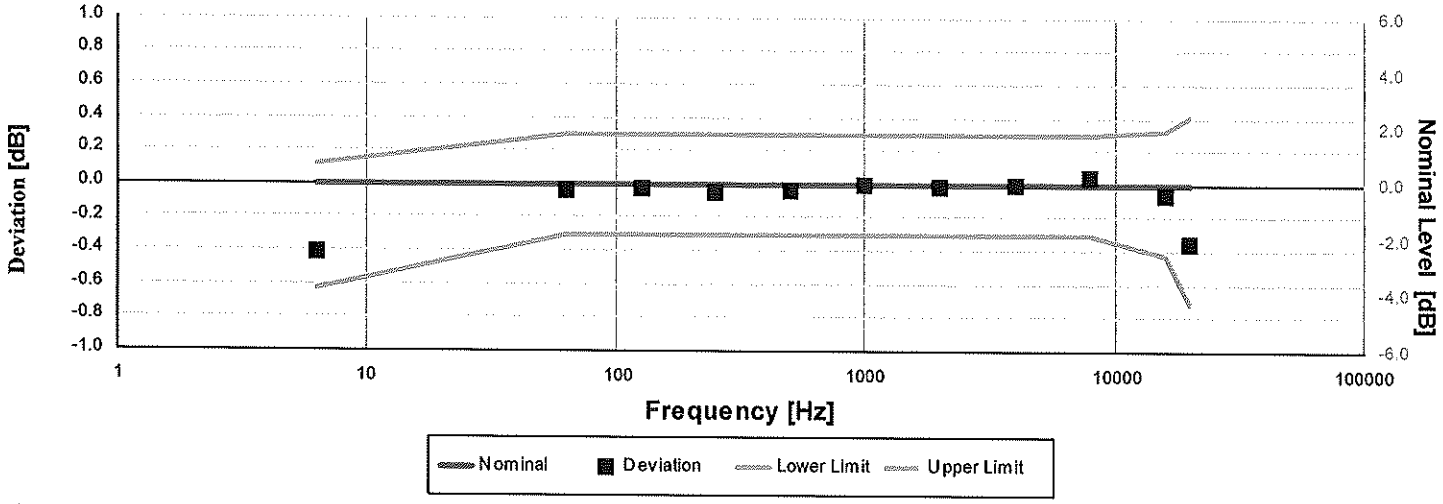
Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev S, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa; Reference Range: 0 dB gain

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Hart Scientific 2626-S Humidity/Temperature Sensor	2023-02-20	2024-08-20	006946
SRS DS360 Ultra Low Distortion Generator	2023-03-31	2024-03-31	007174

Z-weight Filter Response

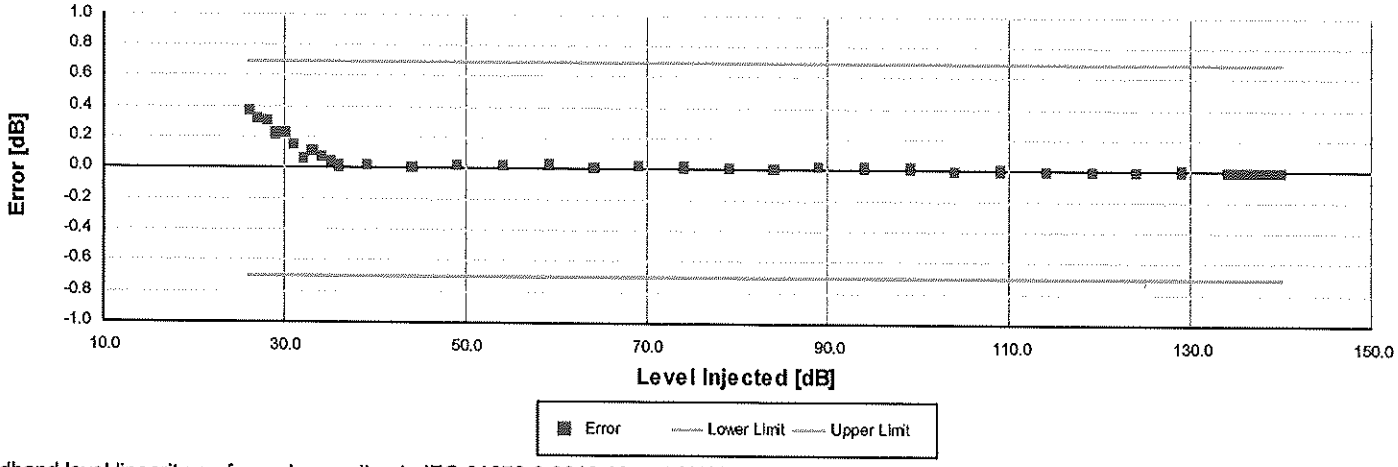


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.41	-0.41	-0.63	0.12	0.15	Pass
63.10	-0.03	-0.03	-0.30	0.30	0.15	Pass
125.89	-0.03	-0.03	-0.30	0.30	0.15	Pass
251.19	-0.05	-0.05	-0.30	0.30	0.15	Pass
501.19	-0.03	-0.03	-0.30	0.30	0.15	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.15	Pass
1,995.26	-0.02	-0.02	-0.30	0.30	0.15	Pass
3,981.07	0.00	0.00	-0.30	0.30	0.15	Pass
7,943.28	0.04	0.04	-0.30	0.30	0.15	Pass
15,848.93	-0.06	-0.06	-0.42	0.32	0.15	Pass
19,952.62	-0.35	-0.35	-0.71	0.41	0.15	Pass

-- End of measurement results--

A-weighted 0 dB Gain Broadband Log Linearity: 8,000.00 Hz



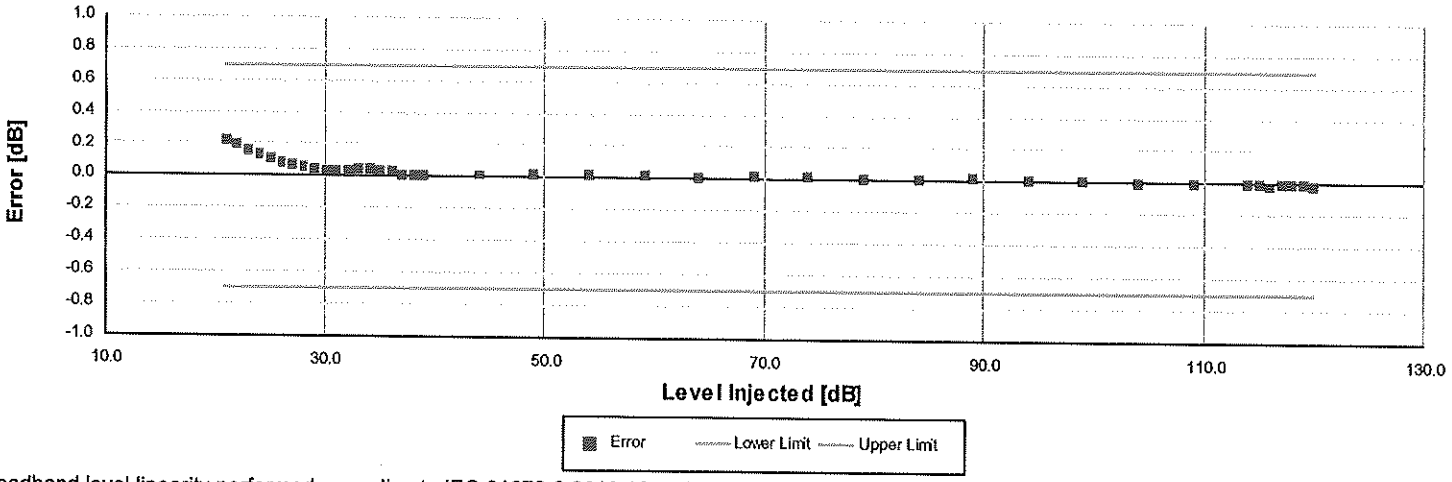
Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
26.00	0.38	-0.70	0.70	0.16	Pass
27.00	0.32	-0.70	0.70	0.16	Pass
28.00	0.31	-0.70	0.70	0.16	Pass
29.00	0.23	-0.70	0.70	0.16	Pass
30.00	0.23	-0.70	0.70	0.16	Pass
31.00	0.15	-0.70	0.70	0.16	Pass
32.00	0.06	-0.70	0.70	0.16	Pass
33.00	0.12	-0.70	0.70	0.16	Pass
34.00	0.07	-0.70	0.70	0.16	Pass
35.00	0.05	-0.70	0.70	0.16	Pass
36.00	0.02	-0.70	0.70	0.16	Pass
39.00	0.02	-0.70	0.70	0.16	Pass
44.00	0.01	-0.70	0.70	0.16	Pass
49.00	0.02	-0.70	0.70	0.16	Pass
54.00	0.02	-0.70	0.70	0.16	Pass
59.00	0.03	-0.70	0.70	0.16	Pass
64.00	0.01	-0.70	0.70	0.16	Pass
69.00	0.02	-0.70	0.70	0.16	Pass
74.00	0.02	-0.70	0.70	0.16	Pass
79.00	0.02	-0.70	0.70	0.16	Pass
84.00	0.02	-0.70	0.70	0.16	Pass
89.00	0.02	-0.70	0.70	0.16	Pass
94.00	0.02	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	0.00	-0.70	0.70	0.15	Pass
109.00	0.00	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.00	-0.70	0.70	0.15	Pass
124.00	0.00	-0.70	0.70	0.15	Pass
129.00	0.01	-0.70	0.70	0.15	Pass
134.00	0.00	-0.70	0.70	0.15	Pass
135.00	0.00	-0.70	0.70	0.15	Pass
136.00	0.00	-0.70	0.70	0.15	Pass
137.00	0.00	-0.70	0.70	0.15	Pass
138.00	0.00	-0.70	0.70	0.15	Pass
139.00	0.00	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
140.00	-0.01	-0.70	0.70	0.15	Pass

-- End of measurement results--

A-weighted 20 dB Gain Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
21.00	0.22	-0.70	0.70	0.16	Pass
22.00	0.19	-0.70	0.70	0.16	Pass
23.00	0.16	-0.70	0.70	0.16	Pass
24.00	0.14	-0.70	0.70	0.16	Pass
25.00	0.12	-0.70	0.70	0.16	Pass
26.00	0.09	-0.70	0.70	0.16	Pass
27.00	0.07	-0.70	0.70	0.16	Pass
28.00	0.06	-0.70	0.70	0.16	Pass
29.00	0.04	-0.70	0.70	0.16	Pass
30.00	0.03	-0.70	0.70	0.16	Pass
31.00	0.04	-0.70	0.70	0.16	Pass
32.00	0.03	-0.70	0.70	0.16	Pass
33.00	0.05	-0.70	0.70	0.16	Pass
34.00	0.05	-0.70	0.70	0.16	Pass
35.00	0.04	-0.70	0.70	0.16	Pass
36.00	0.03	-0.70	0.70	0.16	Pass
37.00	0.01	-0.70	0.70	0.16	Pass
38.00	0.01	-0.70	0.70	0.16	Pass
39.00	0.01	-0.70	0.70	0.16	Pass
44.00	0.02	-0.70	0.70	0.16	Pass
49.00	0.02	-0.70	0.70	0.16	Pass
54.00	0.02	-0.70	0.70	0.16	Pass
59.00	0.03	-0.70	0.70	0.16	Pass
64.00	0.01	-0.70	0.70	0.16	Pass
69.00	0.02	-0.70	0.70	0.16	Pass
74.00	0.02	-0.70	0.70	0.16	Pass
79.00	0.01	-0.70	0.70	0.16	Pass
84.00	0.01	-0.70	0.70	0.16	Pass
89.00	0.02	-0.70	0.70	0.16	Pass
94.00	0.01	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	0.00	-0.70	0.70	0.15	Pass
109.00	0.00	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
115.00	0.00	-0.70	0.70	0.15	Pass
116.00	-0.02	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
117.00	0.00	-0.70	0.70	0.15	Pass
118.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.00	-0.70	0.70	0.15	Pass
120.00	-0.01	-0.70	0.70	0.15	Pass

-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
139.00	40	Negative Pulse	135.97	134.52	136.52	0.15	Pass
		Positive Pulse	135.99	134.52	136.52	0.15	Pass
	30	Negative Pulse	134.90	134.52	136.52	0.15	Pass
		Positive Pulse	135.05	134.52	136.52	0.15	Pass

-- End of measurement results--

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.10	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.12	± 0.50	0.16 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.16	± 1.50	0.15 ‡	Pass
108.00	3	-0.14	± 0.50	0.18 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	0.01	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.17	± 1.50	0.15 ‡	Pass
108.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.13	± 1.00	0.15 ‡	Pass
	10	0.01	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	94.03	93.91	94.11	0.15	Pass
0 dB Gain, Linearity	29.14	28.31	29.71	0.16	Pass
20 dB Gain	94.03	93.91	94.11	0.15	Pass
20 dB Gain, Linearity	24.11	23.31	24.71	0.16	Pass
OBA Low Range	94.01	93.91	94.11	0.15	Pass
OBA Normal Range	94.01	93.20	94.80	0.15	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	6.17	15.00	Pass
C-weight Noise Floor	11.08	17.30	Pass
Z-weight Noise Floor	20.24	24.50	Pass

-- End of measurement results--

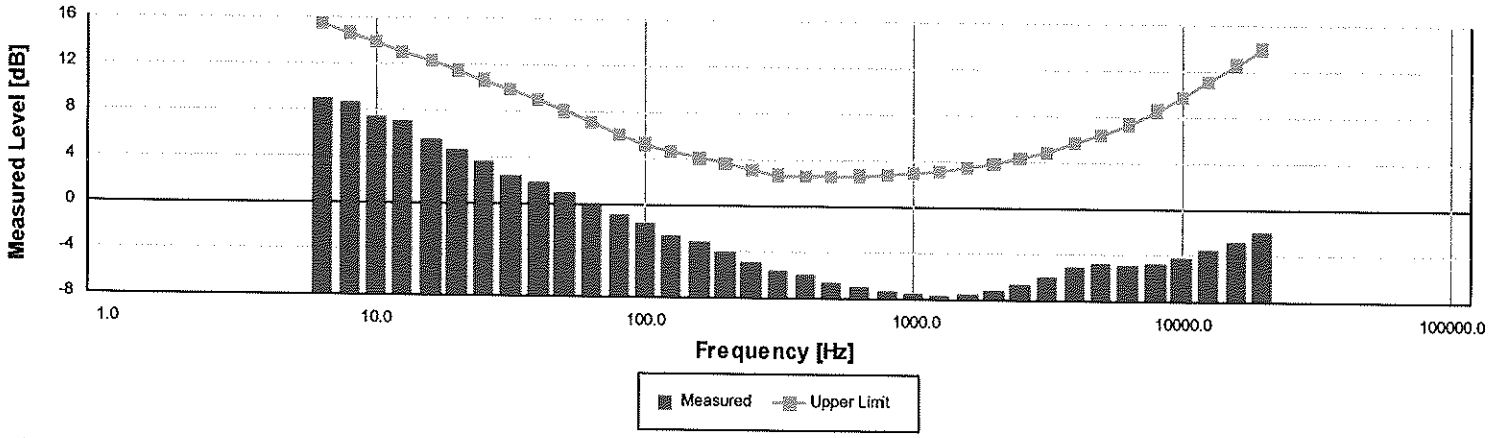
Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	137.58	137.20	138.80	0.15	Pass
THD	-74.29		-60.00	0.01 ‡	Pass
THD+N	-66.76		-60.00	0.01 ‡	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range and 20 dB gain.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	9.10	15.50	Pass
8.00	8.74	14.70	Pass
10.00	7.52	13.90	Pass
12.50	7.09	13.10	Pass
16.00	5.61	12.30	Pass
20.00	4.79	11.50	Pass
25.00	3.61	10.70	Pass
31.50	2.41	9.90	Pass
40.00	1.97	9.10	Pass
50.00	1.03	8.10	Pass
63.00	0.06	7.10	Pass
80.00	-0.82	6.10	Pass
100.00	-1.48	5.30	Pass
125.00	-2.59	4.70	Pass
160.00	-3.11	4.10	Pass
200.00	-4.04	3.60	Pass
250.00	-4.79	3.10	Pass
315.00	-5.55	2.70	Pass
400.00	-5.99	2.60	Pass
500.00	-6.61	2.60	Pass
630.00	-7.01	2.70	Pass
800.00	-7.28	2.80	Pass
1,000.00	-7.49	3.00	Pass
1,250.00	-7.60	3.20	Pass
1,600.00	-7.50	3.50	Pass
2,000.00	-7.17	3.80	Pass
2,500.00	-6.64	4.30	Pass
3,150.00	-5.86	4.90	Pass
4,000.00	-5.03	5.70	Pass
5,000.00	-4.64	6.40	Pass
6,300.00	-4.79	7.40	Pass
8,000.00	-4.64	8.60	Pass
10,000.00	-4.18	9.80	Pass
12,500.00	-3.51	11.20	Pass
16,000.00	-2.71	12.60	Pass
20,000.00	-1.82	14.00	Pass

-- End of measurement results--

-- End of Report--

Signatory: Jacob Cannon

LARSON DAVIS – A PCB DIVISION
1681 West 820 North
Provo,UT 84601,United States
716-684-0001

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LARSON DAVIS
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THE MODAL SHOP
AN AMPHENOL COMPANY

10310 Aerohub Boulevard
Cincinnati, OH 45215
Ph: 513.351.9919
Fax: 513.458.2172
www.modalshop.com

~Certificate of Calibration~

Manufacturer: PCB
Model Number: 377B02
Serial Number: 338606
Asset ID:
Description: Free-Field Microphone

Customer: TMS Rental
Address:

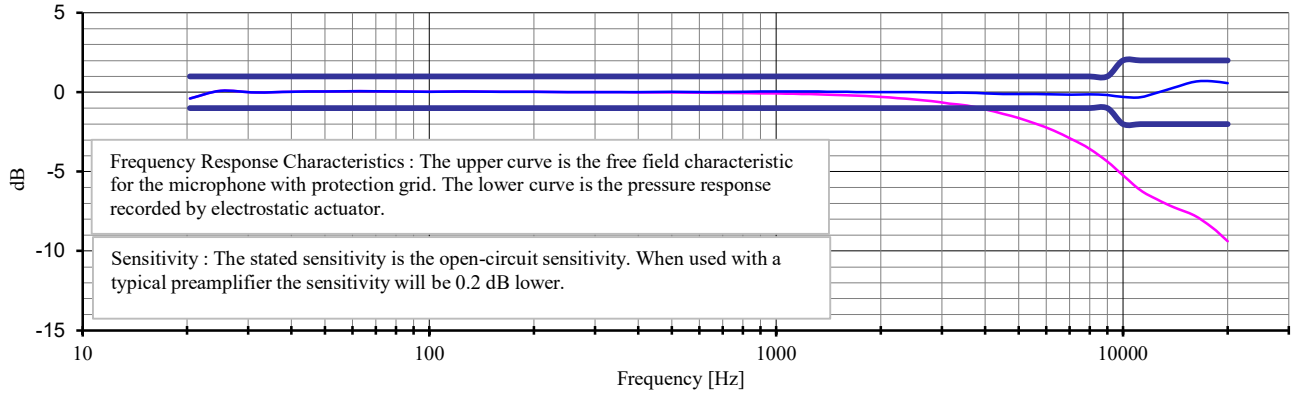
Cal Date / Cal ID: Mar 23, 2023 14:55:14
Due Date:

Sensitivity:	**251.29 Hz**	**1000 Hz**	
	-26.46	-26.54	dB re. 1V/Pa
	47.51	47.11	mV/Pa

Temperature:	75 (24)	°F (°C)
Humidity:	44	%
Ambient Pressure:	990.6	mbar

Reference Sens: In Tolerance
Freq. Response: In Tolerance

Polarization Voltage: 0 VDC



Traceability: The calibration is traceable through NIST Project A3214.
Notes: Calibration results relate only to the items calibrated.
This certificate may not be reproduced, except in full, without written permission.
This calibration is performed in compliance with ISO 9001, ISO 17025 and ANSI Z540.
Measurement uncertainty (250 Hz sensitivity calibration) at 95% confidence level: 0.30 dB
Calibrated per procedure PRD-P204.

User Note: As Found / As Left: In Tolerance.

Frequency Response with reference to level at 251.29 Hz

Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)
20.4	-0.39	**630**	0.01	**4500**	-0.11		
25	0.09	**800**	0.04	**5000**	-0.11		
31.5	-0.02	**1000**	0.04	**5600**	-0.11		
40	0.03	**1120**	0.04	**6300**	-0.13		
50	0.05	**1250**	0.04	**7100**	-0.16		
63	0.07	**1400**	0.04	**8000**	-0.13		
80	0.05	**1600**	0.02	**9000**	-0.18		
100	0.03	**1800**	0.02	**10000**	-0.29		
125	0.05	**2000**	0.02	**11200**	-0.32		
160	0.03	**2240**	0.00	**12500**	-0.03		
200	0.02	**2500**	0.00	**14000**	0.28		
250	0.01	**2800**	-0.01	**16000**	0.66		
315	0.01	**3150**	-0.03	**18000**	0.70		
400	0.01	**3550**	-0.02	**20000**	0.57		
500	0.03	**4000**	-0.07				

Technician: Ed Devlin

Approval: Edward A. Devlin

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	2/28/2023	2/28/2024

ACCREDITED
Calibration Lab
CALIBRATION CERT 2649.01

Calibration Certificate

Certificate Number 2023005212
Customer:
The Modal Shop
10310 AeroHub Boulevard
Cincinnati, OH 45215, United States

Model Number	831	***Procedure Number***	D0001.8378		
Serial Number	0001194	***Technician***	Jacob Cannon		
Test Results	**Pass**	***Calibration Date***	28 Apr 2023		
Initial Condition	Inoperable	***Calibration Due***			
		Temperature	23.64	°C	± 0.25 °C
Description	Larson Davis Model 831	***Humidity***	49.3	%RH	± 2.0 %RH
	Class 1 Sound Level Meter	***Static Pressure***	86.79	kPa	± 0.13 kPa
	Firmware Revision: 2.403				

Evaluation Method Tested electrically using Larson Davis PRM831 S/N 036756 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1
IEC 61260:2001 Class 1	ANSI S1.11 (R2009) Class 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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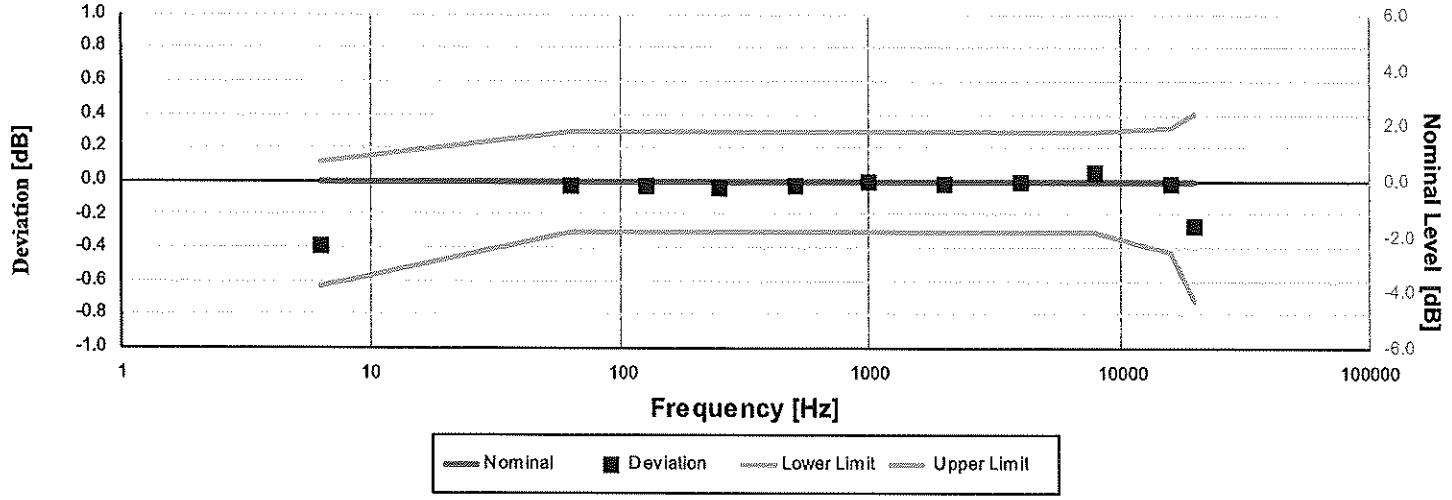
Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev S, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa; Reference Range: 0 dB gain

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Hart Scientific 2626-S Humidity/Temperature Sensor	2023-02-20	2024-08-20	006946
SRS DS360 Ultra Low Distortion Generator	2023-03-31	2024-03-31	007174

Z-weight Filter Response

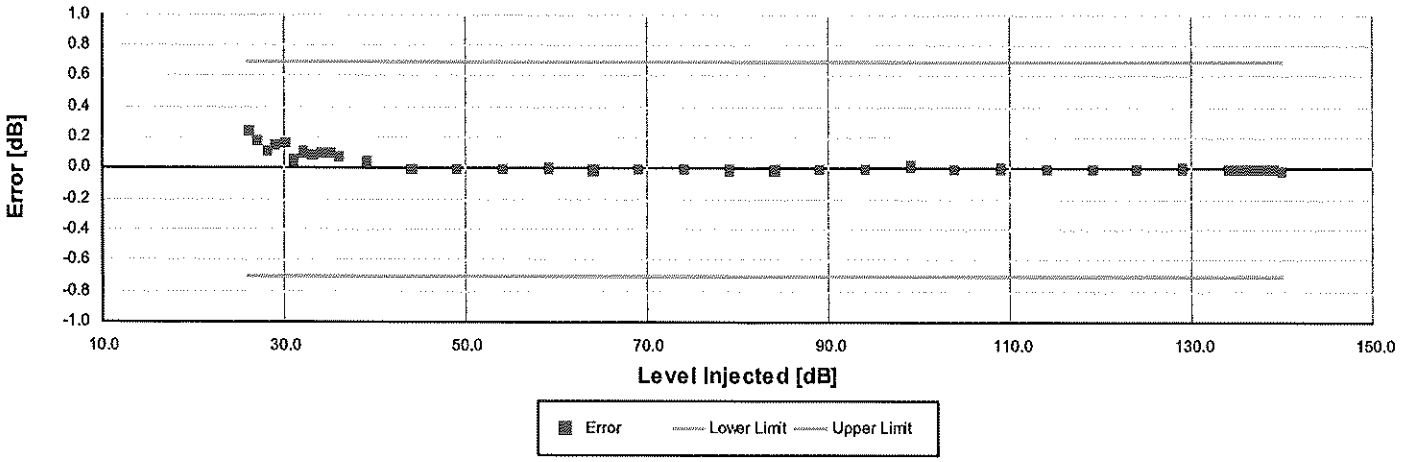


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.39	-0.39	-0.63	0.12	0.15	Pass
63.10	-0.03	-0.03	-0.30	0.30	0.15	Pass
125.89	-0.03	-0.03	-0.30	0.30	0.15	Pass
251.19	-0.04	-0.04	-0.30	0.30	0.15	Pass
501.19	-0.03	-0.03	-0.30	0.30	0.15	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.15	Pass
1,995.26	-0.02	-0.02	-0.30	0.30	0.15	Pass
3,981.07	0.00	0.00	-0.30	0.30	0.15	Pass
7,943.28	0.05	0.05	-0.30	0.30	0.15	Pass
15,848.93	-0.01	-0.01	-0.42	0.32	0.15	Pass
19,952.62	-0.27	-0.27	-0.71	0.41	0.15	Pass

-- End of measurement results--

A-weighted 0 dB Gain Broadband Log Linearity: 8,000.00 Hz



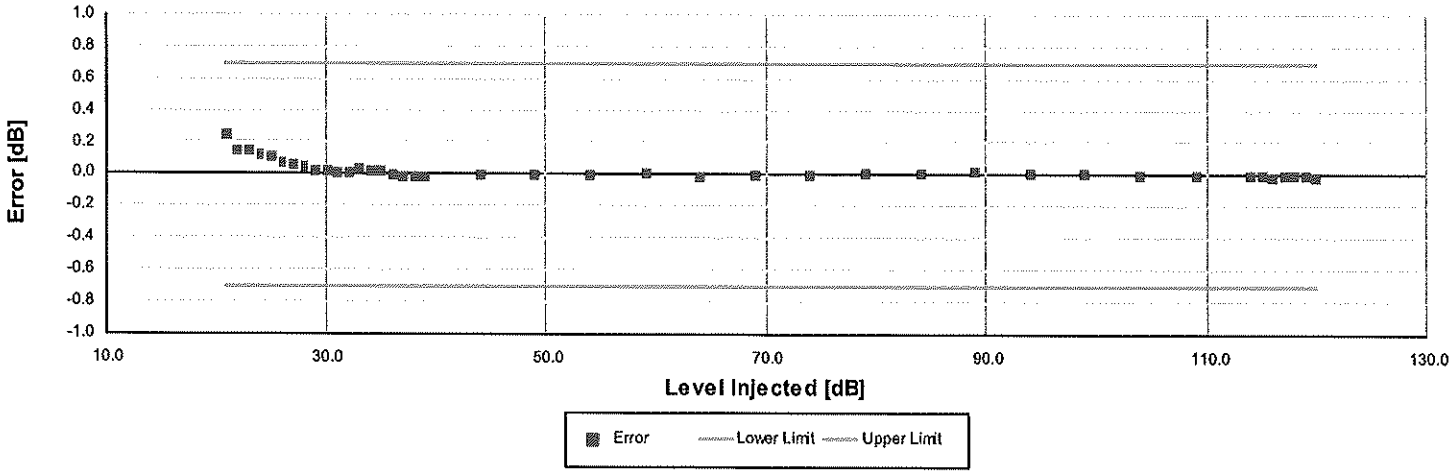
Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
26.00	0.24	-0.70	0.70	0.16	Pass
27.00	0.18	-0.70	0.70	0.16	Pass
28.00	0.12	-0.70	0.70	0.16	Pass
29.00	0.15	-0.70	0.70	0.16	Pass
30.00	0.17	-0.70	0.70	0.16	Pass
31.00	0.06	-0.70	0.70	0.16	Pass
32.00	0.11	-0.70	0.70	0.16	Pass
33.00	0.09	-0.70	0.70	0.16	Pass
34.00	0.10	-0.70	0.70	0.16	Pass
35.00	0.10	-0.70	0.70	0.16	Pass
36.00	0.07	-0.70	0.70	0.16	Pass
39.00	0.05	-0.70	0.70	0.16	Pass
44.00	0.00	-0.70	0.70	0.16	Pass
49.00	0.00	-0.70	0.70	0.16	Pass
54.00	0.00	-0.70	0.70	0.16	Pass
59.00	0.01	-0.70	0.70	0.16	Pass
64.00	-0.01	-0.70	0.70	0.16	Pass
69.00	0.00	-0.70	0.70	0.16	Pass
74.00	0.00	-0.70	0.70	0.16	Pass
79.00	-0.01	-0.70	0.70	0.16	Pass
84.00	-0.01	-0.70	0.70	0.16	Pass
89.00	0.00	-0.70	0.70	0.16	Pass
94.00	0.00	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	0.00	-0.70	0.70	0.15	Pass
109.00	0.01	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.00	-0.70	0.70	0.15	Pass
124.00	0.00	-0.70	0.70	0.15	Pass
129.00	0.01	-0.70	0.70	0.15	Pass
134.00	0.00	-0.70	0.70	0.15	Pass
135.00	0.00	-0.70	0.70	0.15	Pass
136.00	0.00	-0.70	0.70	0.15	Pass
137.00	0.00	-0.70	0.70	0.15	Pass
138.00	0.00	-0.70	0.70	0.15	Pass
139.00	0.00	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
140.00	-0.02	-0.70	0.70	0.15	Pass

-- End of measurement results--

A-weighted 20 dB Gain Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
21.00	0.25	-0.70	0.70	0.16	Pass
22.00	0.15	-0.70	0.70	0.16	Pass
23.00	0.15	-0.70	0.70	0.16	Pass
24.00	0.12	-0.70	0.70	0.16	Pass
25.00	0.11	-0.70	0.70	0.16	Pass
26.00	0.08	-0.70	0.70	0.16	Pass
27.00	0.06	-0.70	0.70	0.16	Pass
28.00	0.04	-0.70	0.70	0.16	Pass
29.00	0.02	-0.70	0.70	0.16	Pass
30.00	0.02	-0.70	0.70	0.16	Pass
31.00	0.01	-0.70	0.70	0.16	Pass
32.00	0.01	-0.70	0.70	0.16	Pass
33.00	0.04	-0.70	0.70	0.16	Pass
34.00	0.03	-0.70	0.70	0.16	Pass
35.00	0.02	-0.70	0.70	0.16	Pass
36.00	0.00	-0.70	0.70	0.16	Pass
37.00	-0.01	-0.70	0.70	0.16	Pass
38.00	-0.01	-0.70	0.70	0.16	Pass
39.00	-0.01	-0.70	0.70	0.16	Pass
44.00	-0.01	-0.70	0.70	0.16	Pass
49.00	0.00	-0.70	0.70	0.16	Pass
54.00	0.00	-0.70	0.70	0.16	Pass
59.00	0.01	-0.70	0.70	0.16	Pass
64.00	-0.01	-0.70	0.70	0.16	Pass
69.00	0.00	-0.70	0.70	0.16	Pass
74.00	0.00	-0.70	0.70	0.16	Pass
79.00	0.01	-0.70	0.70	0.16	Pass
84.00	0.01	-0.70	0.70	0.16	Pass
89.00	0.02	-0.70	0.70	0.16	Pass
94.00	0.02	-0.70	0.70	0.16	Pass
99.00	0.02	-0.70	0.70	0.16	Pass
104.00	0.00	-0.70	0.70	0.15	Pass
109.00	0.00	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
115.00	0.00	-0.70	0.70	0.15	Pass
116.00	-0.02	-0.70	0.70	0.15	Pass

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
117.00	0.00	-0.70	0.70	0.15	Pass
118.00	0.00	-0.70	0.70	0.15	Pass
119.00	0.00	-0.70	0.70	0.15	Pass
120.00	-0.01	-0.70	0.70	0.15	Pass

-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
139.00	40	Negative Pulse	135.99	134.51	136.51	0.15	Pass
		Positive Pulse	135.99	134.51	136.51	0.15	Pass
	30	Negative Pulse	135.06	134.51	136.51	0.15	Pass
		Positive Pulse	135.06	134.51	136.51	0.15	Pass

-- End of measurement results--

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.13	± 0.50	0.16 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	-0.08	± 1.50	0.15 ‡	Pass
108.00	3	-0.14	± 0.50	0.18 ‡	Pass
	5	-0.13	± 1.00	0.15 ‡	Pass
	10	0.01	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
138.00	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
128.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
118.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.13	± 1.00	0.15 ‡	Pass
	10	0.00	± 1.50	0.15 ‡	Pass
108.00	3	-0.13	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	-0.25	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	94.00	93.91	94.11	0.15	Pass
0 dB Gain, Linearity	29.15	28.31	29.71	0.16	Pass
20 dB Gain	94.02	93.91	94.11	0.15	Pass
20 dB Gain, Linearity	24.04	23.31	24.71	0.16	Pass
OBA Low Range	94.01	93.91	94.11	0.15	Pass
OBA Normal Range	94.01	93.20	94.80	0.15	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	5.31	15.00	Pass
C-weight Noise Floor	11.75	17.30	Pass
Z-weight Noise Floor	22.45	24.50	Pass

-- End of measurement results--

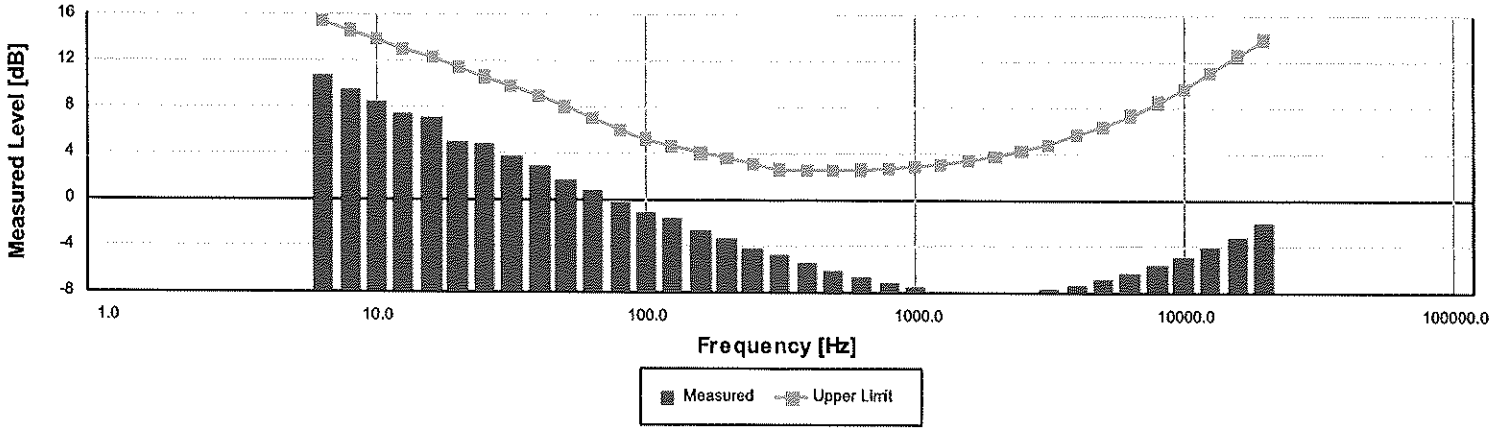
Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	137.53	137.20	138.80	0.15	Pass
THD	-71.61		-60.00	0.01 ‡	Pass
THD+N	-65.55		-60.00	0.01 ‡	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range and 20 dB gain.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	10.77	15.50	Pass
8.00	9.59	14.70	Pass
10.00	8.60	13.90	Pass
12.50	7.46	13.10	Pass
16.00	7.13	12.30	Pass
20.00	5.07	11.50	Pass
25.00	4.84	10.70	Pass
31.50	3.84	9.90	Pass
40.00	2.98	9.10	Pass
50.00	1.82	8.10	Pass
63.00	0.90	7.10	Pass
80.00	-0.12	6.10	Pass
100.00	-1.02	5.30	Pass
125.00	-1.59	4.70	Pass
160.00	-2.54	4.10	Pass
200.00	-3.26	3.60	Pass
250.00	-4.09	3.10	Pass
315.00	-4.76	2.70	Pass
400.00	-5.32	2.60	Pass
500.00	-6.12	2.60	Pass
630.00	-6.64	2.70	Pass
800.00	-7.13	2.80	Pass
1,000.00	-7.53	3.00	Pass
1,250.00	-7.85	3.20	Pass
1,600.00	-7.95	3.50	Pass
2,000.00	-7.98	3.80	Pass
2,500.00	-7.91	4.30	Pass
3,150.00	-7.61	4.90	Pass
4,000.00	-7.25	5.70	Pass
5,000.00	-6.80	6.40	Pass
6,300.00	-6.22	7.40	Pass
8,000.00	-5.57	8.60	Pass
10,000.00	-4.79	9.80	Pass
12,500.00	-3.97	11.20	Pass
16,000.00	-3.06	12.60	Pass
20,000.00	-1.95	14.00	Pass

-- End of measurement results--

-- End of Report--

Signatory: *Jacob Cannon*

LARSON DAVIS – A PCB DIVISION
1681 West 820 North
Provo, UT 84601, United States
716-684-0001

ACCREDITED
CERT #3622.01

LARSON DAVIS
A PCB DIVISION

~ *Certificate of Calibration and Compliance* ~

Model : 377B02 **Manufacturer :** PCB

Serial : 344581 **Description :** 1/2" Free-Field Microphone

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	Control #	Cal Date	Due Date
National Instruments	PCIe-6351	01896F08	CA1918	10/19/2021	04/19/2023
Larson Davis	PRM915	131	CA1205	03/31/2022	03/31/2023
Larson Davis	PRM902	4943	CA1162	06/24/2022	06/23/2023
Larson Davis	PRM916	129	CA1084	06/23/2022	06/23/2023
Larson Davis	CAL250	5025	CA1277	05/10/2022	05/10/2023
Larson Davis	2201	144	CA1409	04/25/2022	04/25/2023
Larson Davis	GPRM902	5460	CA2151	05/20/2022	05/19/2023
Larson Davis	PRM915	147	CA2179	08/15/2022	08/15/2023
Larson Davis	PRA951-4	0241	CA1449	06/23/2022	06/23/2023
Bruel & Kjaer	4192	3259547	CA3214	02/03/2022	02/03/2023
Newport	iTHX-SD/N	1080002	CA1511	02/07/2022	02/07/2023
PCB	68510-02	N/A	CA2672	02/09/2022	02/09/2023

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found : n/a

As Left : New Unit, In Tolerance

Notes

1. Calibration of reference equipment is traceable to one or more of the following National Labs; NIST, PTB or DFM.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. Measurement results relate only to the items tested. Refer to Manufacturer's Specification Sheet for performance details.
5. Open Circuit Sensitivity is measured using the voltage insertion method following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-20.
8. Product is compliant with specification if measured value is within or equal to the specification tolerance. Product is not compliant with specification if measured value falls outside of the specification tolerance.

Technician: Leonard Lukasik Date: 01/20/2023

ilac-MRA A2LA ACCREDITED CALIBRATION CERT #: 1662.01

PCB PIEZOTRONICS INC
3425 WALDEN AVENUE - DEPEW, NY 14043
TEL: 888-684-0013 - FAX: 716-685-3886 - www.pcb.com

ID: CAL:112-3757083133.708+D

~ *Calibration Report* ~

Model :	377B02	**Manufacturer :**	PCB
Serial :	344581	**Description :**	1/2" Free-Field Microphone

Calibration Data

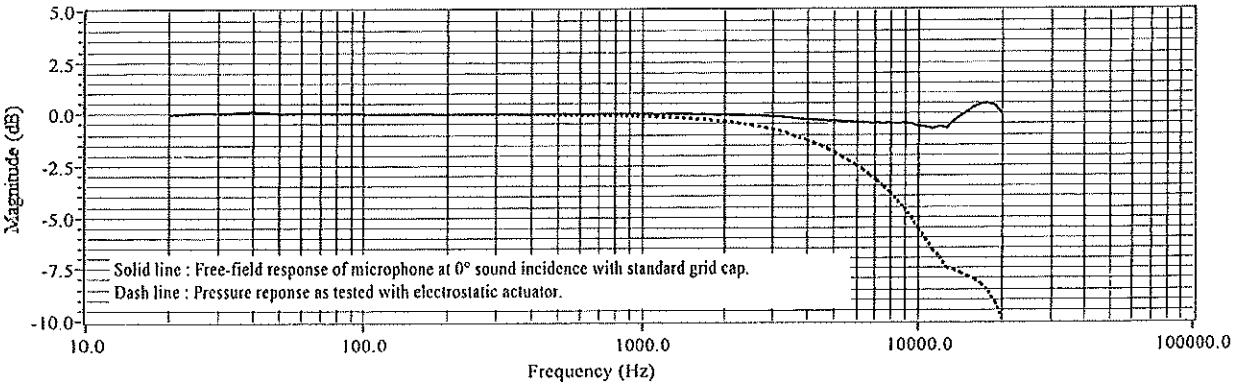
Open Circuit Sensitivity at 251.2 Hz : 49.74 mV/Pa
-26.07 dB re 1 V/Pa

Polarization Voltage, External : 0 V

Capacitance : 13.23 pF

Temperature: 68 °F (20 °C) Ambient Pressure: 979 mbar Relative Humidity: 38 %

Frequency Response (0 dB at 251.2 Hz)



Frequency (Hz)	Pressure (dB)	Free-Field (dB)	Frequency (Hz)	Pressure (dB)	Free-Field (dB)	Frequency (Hz)	Pressure (dB)	Free-Field (dB)
20.00	-0.02	-0.02	1584.90	-0.24	-0.03	6683.40	-2.98	-0.46
25.10	0.07	0.07	1678.80	-0.25	-0.02	7079.50	-3.22	-0.44
31.60	0.05	0.05	1778.30	-0.29	-0.04	7498.90	-3.54	-0.47
39.80	0.13	0.13	1883.60	-0.33	-0.05	7943.30	-3.83	-0.44
50.10	0.03	0.03	1995.30	-0.36	-0.05	8414.00	-4.22	-0.49
63.10	0.05	0.05	2113.50	-0.39	-0.05	8912.50	-4.57	-0.46
79.40	0.04	0.04	2238.70	-0.44	-0.07	9440.60	-5.01	-0.49
100.00	0.03	0.03	2371.40	-0.50	-0.09	10000.00	-5.58	-0.63
125.90	0.02	0.02	2511.90	-0.55	-0.09	10592.50	-6.05	-0.65
158.50	0.02	0.02	2660.70	-0.60	-0.09	11220.20	-6.59	-0.73
199.50	0.01	0.01	2818.40	-0.67	-0.11	11885.00	-6.95	-0.63
251.20	0.00	0.00	2985.40	-0.75	-0.13	12589.30	-7.46	-0.69
316.20	-0.01	0.00	3162.30	-0.82	-0.14	13335.20	-7.56	-0.37
398.10	-0.02	-0.02	3349.70	-0.91	-0.17	14125.40	-7.73	-0.14
501.20	-0.03	0.01	3548.10	-1.05	-0.23	14962.40	-7.88	0.09
631.00	-0.05	-0.01	3758.40	-1.16	-0.26	15848.90	-8.03	0.32
794.30	-0.07	0.02	3981.10	-1.27	-0.27	16788.00	-8.26	0.46
1000.00	-0.11	0.01	4217.00	-1.40	-0.29	17782.80	-8.62	0.49
1059.30	-0.12	0.01	4466.80	-1.54	-0.31	18836.50	-9.12	0.39
1122.00	-0.13	0.01	4731.50	-1.70	-0.33	19952.60	-9.96	-0.03
1188.50	-0.15	0.00	5011.90	-1.87	-0.34			
1258.90	-0.15	0.01	5308.80	-2.07	-0.37			
1333.50	-0.17	0.01	5623.40	-2.27	-0.39			
1412.50	-0.20	-0.01	5956.60	-2.49	-0.42			
1496.20	-0.21	-0.01	6309.60	-2.70	-0.41			

Technician: Leonard Lukasik Date: 01/20/2023

ilac-MRA ACCREDITED CALIBRATION CERT#: 1152.01

PCB PIEZOTRONICS INC
3425 WALDEN AVENUE - DEPEW, NY 14043
TEL: 888-684-0013 - FAX: 716-685-3886 - www.pcb.com

ID: CAL:112-37570933133.708+0

Calibration Certificate

Certificate Number 2023011260

Customer:
The Modal Shop
10310 AeroHub Boulevard
Cincinnati, OH 45215, United States

Model Number	CAL200	***Procedure Number***	D0001.8386		
Serial Number	21607	***Technician***	Scott Montgomery		
Test Results	**Pass**	***Calibration Date***	28 Aug 2023		
Initial Condition	As Manufactured	***Calibration Due***			
		Temperature	24	°C	± 0.3 °C
Description	Larson Davis CAL200 Acoustic Calibrator	***Humidity***	37	%RH	± 3 %RH
		Static Pressure	101.1	kPa	± 1 kPa

Evaluation Method The data is aquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2017 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	06/21/2023	06/21/2024	001021
Larson Davis Model 2900 Real Time Analyzer	03/31/2023	03/31/2024	001051
Microphone Calibration System	02/22/2023	02/22/2024	005446
1/2" Preamplifier	08/16/2023	08/16/2024	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/04/2023	08/04/2024	006507
1/2 inch Microphone - RI - 200V	10/05/2022	10/05/2023	006510
Pressure Sensor	11/02/2022	11/02/2023	007827

Output Level

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
94	101.1	94.02	93.80	94.20	0.15	Pass
114	100.9	114.01	113.80	114.20	0.14	Pass

-- End of measurement results--

Frequency

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
94	101.1	1,000.11	993.00	1,007.00	0.20	Pass
114	100.9	1,000.11	993.00	1,007.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N)

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
94	101.1	0.38	0.00	2.00	0.25 ‡	Pass
114	100.9	0.34	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Level Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
108.0	107.7	-0.03	-0.25	0.25	0.04 ‡	Pass
101.3	101.2	0.00	-0.25	0.25	0.04 ‡	Pass
92.0	91.9	0.03	-0.25	0.25	0.04 ‡	Pass
83.0	82.9	0.03	-0.25	0.25	0.04 ‡	Pass
74.0	74.0	-0.01	-0.25	0.25	0.04 ‡	Pass
65.0	64.9	-0.09	-0.25	0.25	0.04 ‡	Pass

-- End of measurement results--

Frequency Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
108.0	107.7	0.00	-7.00	7.00	0.20 ‡	Pass
101.3	101.2	0.00	-7.00	7.00	0.20 ‡	Pass
92.0	91.9	0.00	-7.00	7.00	0.20 ‡	Pass
83.0	82.9	0.00	-7.00	7.00	0.20 ‡	Pass
74.0	74.0	-0.01	-7.00	7.00	0.20 ‡	Pass
65.0	64.9	-0.01	-7.00	7.00	0.20 ‡	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N) Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
108.0	107.7	0.32	0.00	2.00	0.25 ‡	Pass
101.3	101.2	0.32	0.00	2.00	0.25 ‡	Pass
92.0	91.9	0.30	0.00	2.00	0.25 ‡	Pass
83.0	82.9	0.30	0.00	2.00	0.25 ‡	Pass
74.0	74.0	0.29	0.00	2.00	0.25 ‡	Pass
65.0	64.9	0.30	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Signatory: Scott Montgomery

LARSON DAVIS – A PCB DIVISION
1681 West 820 North
Provo, UT 84601, United States
716-684-0001

ACCREDITED CERT #3622.01

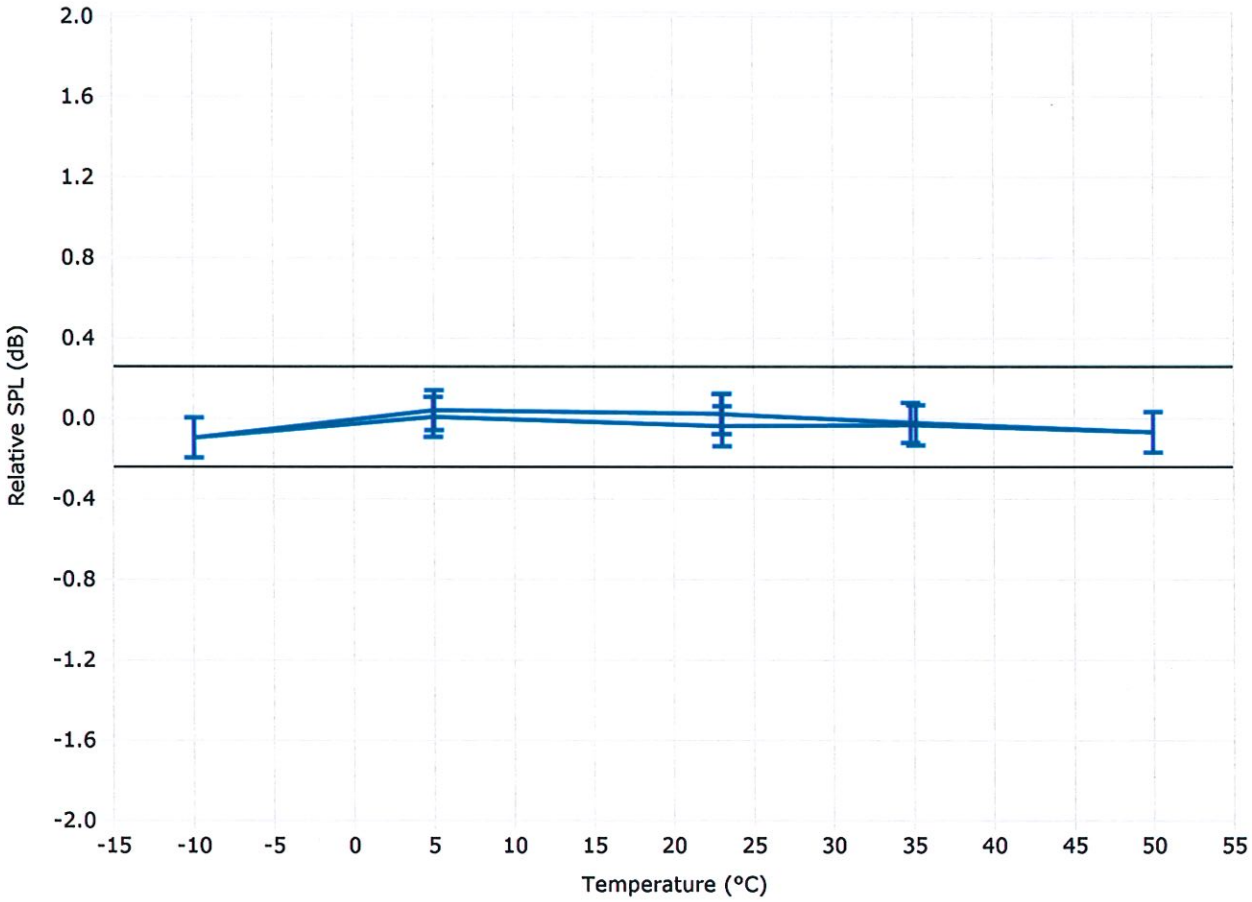
LARSON DAVIS
A PCB DIVISION

Model CAL200 Relative SPL vs. Temperature

Larson Davis Model CAL200 Serial Number: 21607

Model CAL200 Relative SPL vs. Temperature at 50% RH.
A 2559 Mic (SN: 2893) with a PRM901 Preamp (SN: 0160), station 5 was used to check the levels.

Test Date: 17 Jul 2023 2:30:52 PM



0.1dB expanded uncertainty at ~95% confidence level (k=2)

Sequence File: CAL200.SEQ

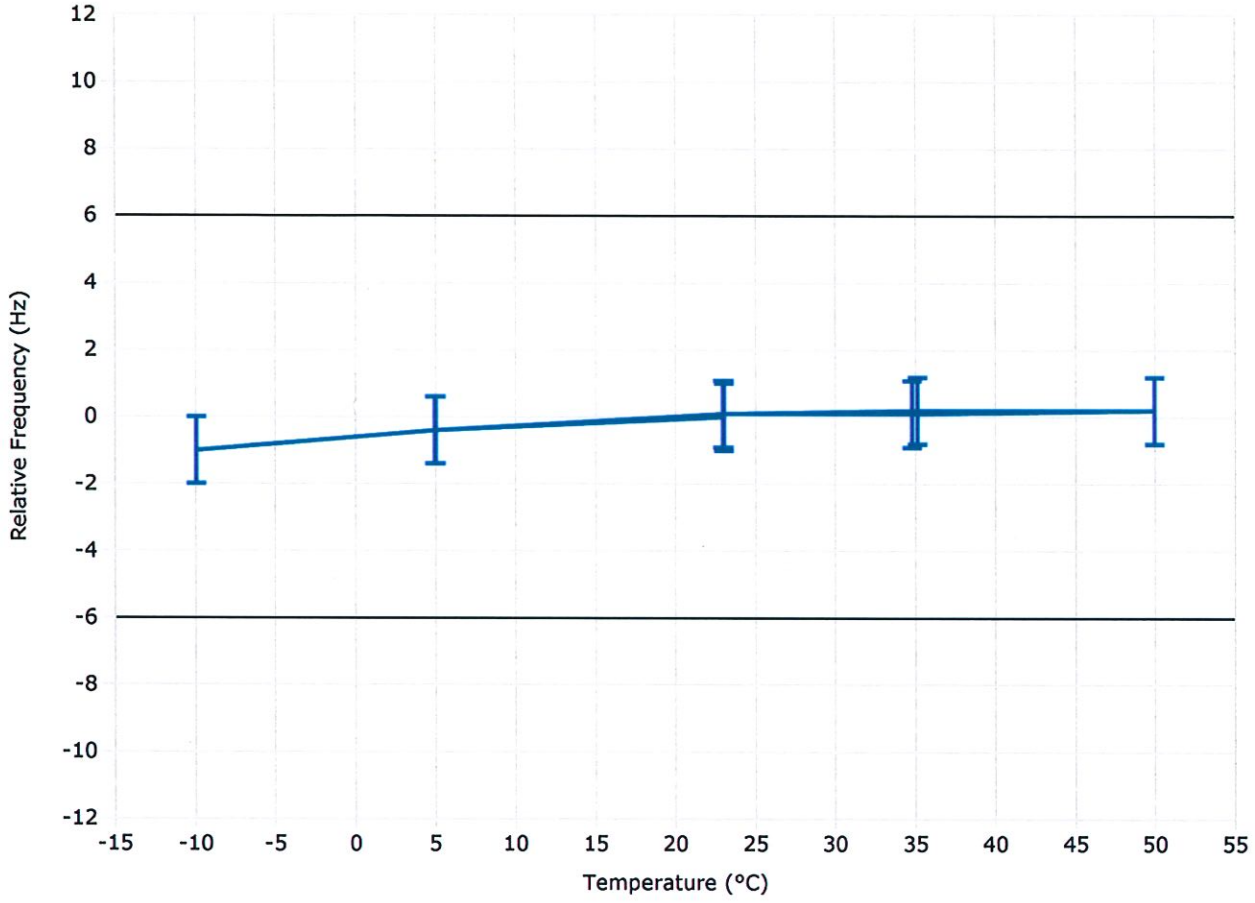
Test Location: Larson Davis – A PCB Division
1681 West 820 North, Provo, Utah 84601
Tel: 716 684-0001 www.LarsonDavis.com

Model CAL200 Relative Frequency vs. Temperature

Larson Davis Model CAL200 Serial Number: 21607

Model CAL200 Relative Frequency vs. Temperature at 50% RH.
A 2559 Mic (SN: 2893) with a PRM901 Preamp (SN: 0160), station 5 was used to check the levels.

Test Date: 17 Jul 2023 2:30:52 PM



1.0 Hz expanded uncertainty at ~95% confidence level (k=2)

Sequence File: CAL200.SEQ

Test Location: Larson Davis – A PCB Division
1681 West 820 North, Provo, Utah 84601
Tel: 716 684-0001 www.LarsonDavis.com

Appendix C – Airshow Schedule

PACIFIC AIRSHOW 2023

*Draft Performer Schedule - **Fri 29 Sept***

Version 4

Air Boss: 126.4
Backup: 121.05
Discrete: 134.7

Ken Ashmore: 714 783-6156
Wayne Boggs: 813 340-5623
Ray Shaw: 619 886-6950
Kellie Hudson: 571 335-2515
Chris Tibbetts: 332 201-4039

Start	End	Duration	Performer	Airfield	Airspace	Description
9:30	10:15	**0:45**	**Thunderbirds Diamond Practice**	SLI	**15k**	F-16 x 4
10:16	10:18	**0:02**	**Matt Jolley Show Intro**	--	**--**	
10:18	10:20	**0:02**	**Australian Anthem**	--	**--**	
10:20	10:22	**0:02**	**Canadian Anthem**	--	**--**	
10:22	10:30	**0:08**	**Leap Frogs Flag Jump USA Anthem**	SLI	**10k**	Jump aircraft USN SH60
10:31	10:41	**0:10**	**Sammy Mason Edge 540 (N540SA)**	SNA	**5k**	
10:42	10:56	**0:14**	**Ace Maker T-33 Jet 2-Ship N933GC & N133DV**	SNA 20R	**7k**	T-33 x2 - Greg Colyer and Rob "Scratch" Mitchell
10:57	11:03	**0:06**	**Trump B757**	PBI	**5K**	
11:04	11:14	**0:10**	**Tom Larkin SubSonex Mini Jet**	SNA	**5k**	
11:15	11:30	**0:15**	**USN F/A-18 Super Hornet Demo**	SLI	**15k**	
11:31	11:36	**0:05**	**CA ANG C-130J High-Speed Pass & Water Drop**	NTD	**5k**	Firefighting Demo **ZOOM BRIEFER PT MUGU**
11:37	11:44	**0:07**	**Lyon Air Museum - Flybys C-47 Skytrain**	SNA 20R	**5k**	C-47 "Willa Dean" - multiple passes at airboss' discretion
11:45	12:35	**0:50**	**Canadian Forces Snowbirds**	SLI	**7k**	
12:36	12:43	**0:07**	**BlackFly**	From Beach	**5k**	
12:44	12:59	**0:15**	**USN F-35C Demo**	SLI	**15k**	F-35C x2 "Raider" airborne - (1) demo, (1) sneak pass - depart together Northbound
13:00	13:10	**0:10**	**Matt Hall & Emma McDonald**	SNA	**5k**	Reigning Red Bull Air Race Champ! MX2 & Extra 300L
13:11	13:19	**0:08**	**FedEx B757 Flybys - 3 passes**	LAX	**5k**	Flybys - expect 3 passes or at air boss' discretion
13:20	13:30	**0:10**	**US Army Helo Demo**	SLI	**5k**	3 UH60s and 2 UH72 "Sokols" 2616th Aviation Batallion, Fort Irwin, CA
13:31	13:46	**0:15**	**US Army Golden Knights**	SLI	**10k**	From Army UH60
13:47	14:05	**0:18**	**USN Growler Demo**	SLI	**10k**	
14:06	14:14	**0:08**	**Red Bull Helicopter Aaron Fitzgerald**	SNA	**5k**	Solo aerobatics in the MBB Bo-105
14:15	14:18	**0:03**	**USAF KC-135**	KRIV	**5k**	**ZOOM BRIEFER MARCH ARB** Flyby boom-down 500'
14:19	14:37	**0:18**	**USAF F-35A Demo**	SLI	**15k**	
14:37	14:51	**0:14**	**USAF Heritage Flight F-35A, F-22, P-51D**	SLI	**5k**	
14:51	15:06	**0:15**	**USAF F-22 Raptor Demo**	SLI	**7k**	
15:07	15:19	**0:12**	**Michael Goulian Extra 330SC**	SNA	**5k**	
15:20	15:31	**0:11**	**Jet Waco Jarrod Lindemann**	SNA 20R	**5k**	N32KP
15:36	16:21	**0:45**	**Thunderbirds**	SLI	**15k**	6x F-16

PACIFIC AIRSHOW 2023

*Draft Performer Schedule - **Sat 30 Sept***

Version 4

Air Boss: 126.4
Backup: 121.05
Discrete: 134.7

Ken Ashmore: 714 783-6156
Wayne Boggs: 813 340-5623
Ray Shaw: 619 886-6950
Kellie Hudson: 571 335-2515
Chris Tibbetts: 332 201-4039

Start	End	Duration	Performer	Airfield	Airspace	Description
10:04	10:08	**0:04**	**Leap Frogs Streamer Drop**	SLI	**5k**	Not in to the wetlands, please.
10:09	10:13	**0:04**	**OC Fire Authority Water Drop**	FUL & SLI	**5k**	Bell 412 x2 + CH47 Chinook - **ZOOM BRIEFER FULLERTON** - American Flag banner tow on outer edge of box
10:14	10:16	**0:02**	**Matt Jolley Show Intro**	--	**--**	
10:16	10:18	**0:02**	**Australian Anthem**	--	**--**	American Flag banner tow on outer edge of box
10:18	10:20	**0:02**	**Canadian Anthem**	--	**--**	American Flag banner tow on outer edge of box
10:20	10:22	**0:02**	**USA Anthem**	--	**--**	American Flag banner tow on outer edge of box
10:22	10:30	**0:08**	**Leap Frogs**	SLI	**10k**	SH60 Helo -
10:31	10:36	**0:05**	**USAF F-15 Bayou Militia**	SLI	**10k**	F-15 flybys
10:37	10:47	**0:10**	**Sammy Mason Edge 540**	SNA	**5k**	N540SA
10:48	11:02	**0:14**	**Ace Maker T-33 Jet 2-Ship**	SNA 20R	**7k**	T-33 x2 - N933GC & N133DV Greg Colyer and Rob "Scratch" Mitchell
11:03	11:13	**0:10**	**Tom Larkin SubSonex Mini Jet**	SNA	**5k**	
11:14	11:29	**0:15**	**USN F/A-18 Super Hornet Demo**	SLI	**15k**	
11:30	11:35	**0:05**	**CA ANG C-130J High-Speed Pass & Water Drop**	NTD	**5k**	Firefighting Demo **ZOOM BRIEFER PT MUGU**
11:36	11:43	**0:07**	**Lyon Air Museum - Flybys C-47 Skytrain**	SNA 20R	**5k**	C-47 "Willa Dean" - multiple passes at airboss' discretion
11:44	12:24	**0:40**	**Canadian Forces Snowbirds**	SLI	**7k**	
12:25	12:33	**0:08**	**BlackFly**	From Beach	**5k**	
12:34	12:49	**0:15**	**USN F-35C Demo**	SLI	**15k**	F-35C x2 "Raider" airborne - (1) demo, (1) sneak pass - depart together Northbound
12:50	13:02	**0:12**	**Michael Goulian Extra 330SC**	SNA	**5k**	N821MG
13:03	13:11	**0:08**	**FedEx B757 Flybys - 3 passes**	LAX	**5k**	Flybys - expect 3 passes or at air boss' discretion
13:12	13:24	**0:12**	**USN Growler Demo**	SLI	**10k**	
13:25	13:33	**0:08**	**Red Bull Helicopter** **Aaron Fitzgerald**	SNA	**5k**	Solo aerobatics in the MBB Bo-105
13:34	13:39	**0:05**	**USAF F-15 Bayou Militia**	SLI	**10k**	F-15 flybys
13:40	13:45	**0:05**	**USAF KC-135**	KRIV	**5k**	**ZOOM BRIEFER MARCH ARB** Flyby boom-down 500'
13:46	13:49	**0:03**	**Tucker Hess Flyby**	SNA	**5k**	
13:50	14:05	**0:15**	**USAF F-35A Demo**	SLI	**15k**	
14:06	14:16	**0:10**	**USAF Heritage Flight F-35A, F-22, P-51D**	SLI	**5k**	
14:17	14:32	**0:15**	**USAF F-22 Raptor Demo**	SLI	**7k**	
14:33	14:41	**0:08**	**US Army Helo Demo**	SLI	**5k**	3 UH60s and 2 UH72 "Sokols" 2616th Aviation Batallion, Fort Irwin, CA
14:42	14:52	**0:10**	**Matt Hall & Emma McDonald**	SNA	**5k**	Reigning Red Bull Air Race Champ! MX2 & Extra 300L
14:53	15:08	**0:15**	**US Army Golden Knights**	SLI	**10k**	From Army UH60
15:13	15:58	**0:45**	**Thunderbirds**	SLI	**15k**	6x F-16

CHAPTER 5
Mitigation Monitoring and Reporting Program

5.1 CEQA Requirements

Section 15091(d) and Section 15097 of the CEQA Guidelines require a public agency to adopt a program for monitoring or reporting on the changes it has required in the project or conditions of approval to substantially lessen significant environmental effects. This Mitigation, Monitoring and Reporting Program (MMRP) summarizes the mitigation commitments identified in the Pacific Airshow (Airshow or Project) EIR (State Clearinghouse No. 2024020006). Mitigation measures are presented in the same order as they occur in the Draft EIR. Further, to ensure enforceability of the biological monitoring efforts, a Project Description feature voluntarily is included in the MMRP that requires biological monitoring before and during the Airshow. Because there are no significant impacts associated with the temporary Airshow activities on biological species, biological monitoring is not required as a mitigation measure.

The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less-than-significant level.
- **Implementation, Monitoring, and Reporting Action:** The appropriate steps to implement and document compliance with the mitigation measures.
- **Responsibility:** The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, the City, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines, Section 15097(a)).
- **Monitoring Schedule:** The general schedule for conducting each task. Because the proposed project does not include a construction phase, the general schedule is summarized as either "prior to operation" and/or "during operation".

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE PACIFIC AIRSHOW HUNTINGTON BEACH PROJECT

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Hazards and Hazardous Materials			
HAZ-1: A qualified avian biologist will conduct one Wildlife Hazard Site Visit (WHSV) prior to the start of the annual Airshow (beginning in 2024) following the protocol developed by the FAA in the *Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans* (Federal Aviation Administration, Advisory Circular 150/5200-38, August 2018 to evaluate potential risk of wildlife strikes at airports, specifically for the proposed temporary aircraft landing pad on the beach during all future Airshow events. The WHSV shall include field observations conducted over one day at dawn, noon, and dusk from a variety of pre-determined locations to ensure complete visual coverage of the location of the temporary runway and immediate surroundings. All signs of birds, mammals, habitat attractants, and wildlife/habitat relationship observations shall be recorded. A wildlife hazard site visit memorandum shall be prepared and include a list of wildlife species or signs observed during the surveys, federal and state status of the species observed, habitat features that may encourage wildlife, natural and artificial wildlife attractants, strike data analysis, and recommendations to reduce wildlife hazards. Recommendations may include developing a long-term management strategy that includes wildlife hazard management and/or reduction in flights under 500 feet above ground level.	• Conduct one WHSV prior to the start of the annual Airshow prior to the start of the annual Airshow. • Conduct field observations over one day at dawn, noon, and dusk from a variety of pre-determined locations to ensure complete visual coverage of the location of the temporary runway and immediate surroundings prior to the start of the annual Airshow. • Record all signs of birds, mammals, habitat attractants, and wildlife/habitat relationship observations prior to the start of the annual Airshow. • Prepare a wildlife hazard site visit memorandum following the annual Airshow.	Applicant	Prior to the start of the annual Airshow
HAZ-2: A qualified biological monitor will be on-site during event performances for the duration of the event (3-5 days) to document bird activity during aircraft flyovers and take-off and landing within the Show Center Area. Biological monitoring will also inform the recommendations to reduce wildlife hazards. Based on monitoring observations, recommendations may include following standard best management practices such as properly disposing of trash to avoid attracting wildlife to the Show Center Area and/or employing means of harassment (e.g., lasers) to disperse birds.	• Monitor and document bird activity during aircraft flyovers and take-off and landing within the Show Center Area during the annual Airshow.	Applicant	During the annual Airshow
NOI-1: The applicant shall implement the following measures for the duration of the event: • The nearest speaker shall be placed at least 475 feet away from any nearby sensitive receptor and any subsequent speakers shall be separated from other speakers by 25 feet parallel to Pacific Coast Highway. Speakers shall also be positioned in a manner that would not point directly towards any nearby sensitive receptor and, instead, face the beach/ocean. • A temporary noise barrier of at least 10 feet in height and constructed of plywood or using a sound blanket shall be installed on public property nearest to the sensitive receptors to the west of the proposed music festival area (Huntington Pacific Beach House Condo complex at 701 Pacific Coast Highway). The temporary noise barriers shall block the line-of-sight between the music festival attendees and similarly elevated ground-level noise-sensitive receptors.	• Placement of the nearest speaker shall be placed at least 475 feet away from any nearby sensitive receptor and any subsequent speakers shall be separated from other speakers by 25 feet parallel to Pacific Coast Highway. Speakers shall also be positioned in a manner that would not point directly towards any nearby sensitive receptor and, instead, face the beach/ocean. • Placement of a temporary noise barrier shall be installed on public property nearest to the sensitive receptors to the west of the proposed music festival area (Huntington Pacific Beach House Condo complex at 701 Pacific Coast Highway).	Applicant	During the annual Airshow

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Project Design Feature			
Project Design Feature 1: The following will occur to ensure that potential impacts to nesting birds remain less than significant: • Pre-airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and the western snowy plover and well beyond the end of the identified nesting season for the light-footed Ridgway's rail and general avian species. • Monitoring efforts will be conducted before and during the Airshow to survey for nests and provide measures to avoid potential impacts. • Daily briefings have and will continue to occur, although the outcome of those briefings cannot be guaranteed.	• Pre-airshow activities would occur at least one week beyond the end of the identified nesting season for the California least tern and the western snowy plover and well beyond the end of the identified nesting season for the light-footed Ridgway's rail and general avian species. • Monitoring efforts to be conducted prior and during the annual Airshow to survey for nests and provide measures to avoid potential impacts. • Daily briefings to occur prior to the start of the annual Airshow.	Applicant	Prior to the start of the annual Airshow and during the annual Airshow

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