

FORUM25

Unlocking Airport Growth: Advancing Effective Noise Management

John Wayne Airport, Orange County
Access and Noise



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JOHN WAYNE AIRPORT
ORANGE COUNTY



- Located in the heart of Orange County, CA
- Among the most noise-sensitive airports in the U.S.
- Residential Communities located in close proximity
- Annual Operations: 334,554 (2024)
 - 32% Commercial
 - 68% General Aviation
- Passengers: 11.08 M (2024)
- Noise management is central to ensuring community compatibility.

Introduction to Noise Abatement at JWA

- JWA is one of the most noise sensitive airports in the United States, and is located in the center of Orange County, California with residential areas in close proximity
- To mitigate potential noise impacts from aircraft operations and to enhance compatibility with surrounding communities, the Airport maintains some of the most stringent noise regulations in the country
- The General Aviation Noise Ordinance (GANO) has been adopted by the County of Orange to regulate the hours of operation and the maximum permitted noise levels associated with general aviation operations
- Compliance with the GANO is mandatory unless deviations are made necessary by Air Traffic Control instructions, a medical or in-flight emergency, or other safety considerations

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The Access & Noise Office (ANO)

- Oversees compliance with the Settlement Agreement, Access Plan, and GANO
- Operates 10 permanent Noise Monitoring Stations
- Responds to community noise complaints
- Works closely with airlines, GA operators, and residents



Regulatory Documents

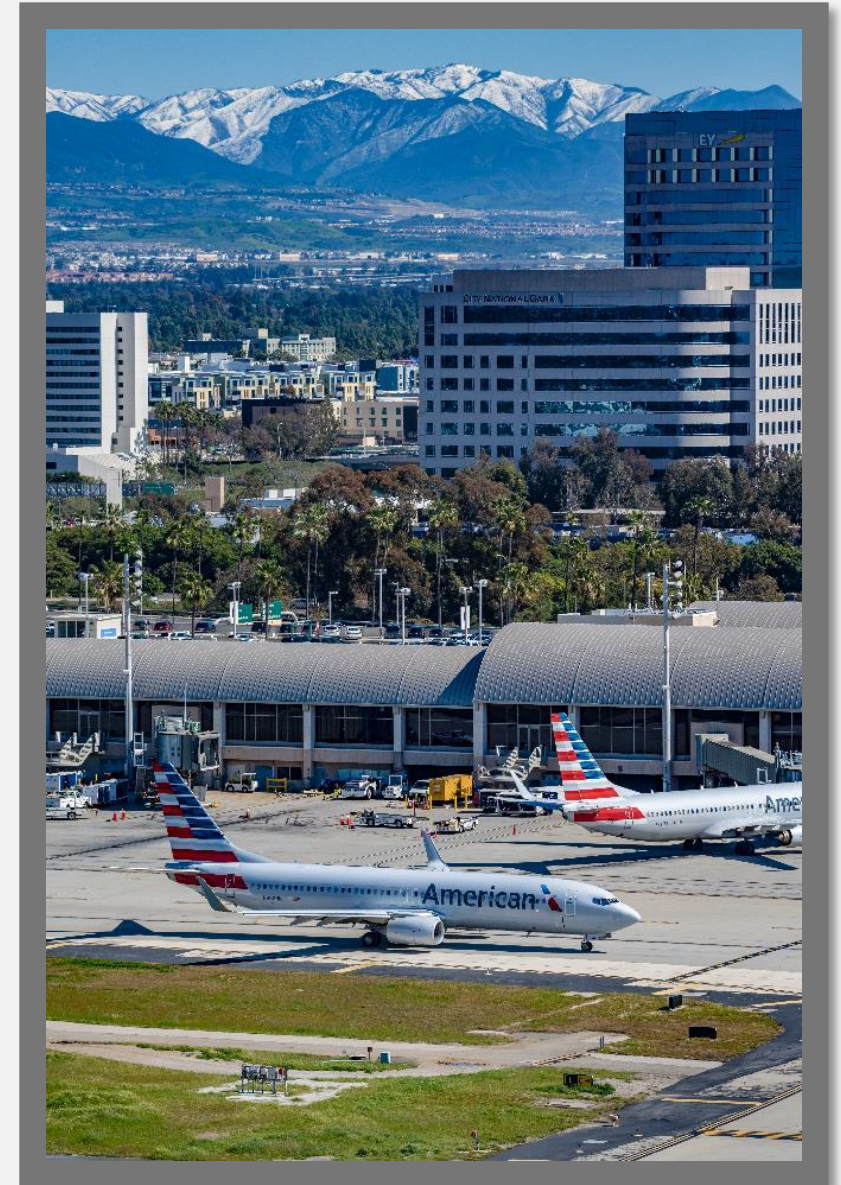
- **1985 Federal District Court Settlement Agreement**
- **Phase 2 Commercial Airline Access Plan and Regulation (“Access Plan”)**
- **General Aviation Noise Ordinance (“GANO”)**

What is the Settlement Agreement?

The Settlement Agreement formalized consensus between the County of Orange, the City of Newport Beach and two community groups (Airport Working Group and Stop Polluting Our Newport) on the nature and extent of facility and operational improvements that could be implemented at JWA.

What is the status of the Settlement Agreement?

The Settlement Agreement was extended through December 31, 2030.



Regulatory Documents (continued)

When and why was the Access Plan created?

The County, as the owner and operator of JWA, has long regulated the use and operation of the Airport to control and reduce adverse environmental impacts associated with the Airport. The Phase 2 Commercial Airline Access Plan and Regulation (“Access Plan”) was created to implement the regulatory limits defined by the 1985 Settlement Agreement.

What is the GANO?

The General Aviation Noise Ordinance provides noise restrictions and a violation structure for general aviation aircraft operations. It also contains the commercial curfew regulations, hours and noise limits.

- Curfew extends 5 additional years beyond the Settlement Agreement term.
- The Settlement Agreement, Access Plan and GANO were grandfathered under the Airport Noise and Capacity Act of 1990 (“ANCA”).

Fundamental Elements

Settlement Agreement:

- Current Term: 1/1/16 – 12/31/30
- Key Provisions
 - ✓ 99 Class A ADDs (95 Passenger + 4 Cargo) thru 12/31/30
 - ✓ 11.8 MAP thru 12/31/25
 - ✓ Potentially, 12.5 MAP from 1/1/26 thru 12/31/30 (EIR 617 LU-2)

Access Plan:

- Allocation and Withdrawal Provisions
- Minimum and Maximum Utilization Requirements
- Penalties and Prohibitions
- Administrative Review Provisions

Types of Operations

Class A and Class E Departure Operations

Defined by quarterly-averaged noise limits at each of JWA's Noise Monitoring Stations

Commercial Aircraft

Noise Monitoring Station	Class A	Class E
NMS 1S	102.5 dB SENEL	94.1 dB SENEL
NMS 2S	101.8 dB SENEL	93.5 dB SENEL
NMS 3S	101.1 dB SENEL	90.3 dB SENEL
NMS 4S	94.8 dB SENEL	86.6 dB SENEL
NMS 5S	95.3 dB SENEL	87.2 dB SENEL
NMS 6S	96.8 dB SENEL	87.2 dB SENEL
NMS 7S	93.7 dB SENEL	86.6 dB SENEL

- Class E has more restrictive noise limits; typically used for short-haul markets
- Certain aircraft types are too loud for Class E
- Certain aircraft types can operate both Class A and Class E
- An aircraft must be qualified to operate within a given noise class
- A qualified aircraft's noise performance is calculated at each of the individual NMS without trade-offs.

Qualified Aircraft

What is a qualified aircraft?

To demonstrate the ability of the air carrier to meet JWA's stringent noise regulations, each carrier must qualify their aircraft through a noise qualification process prior to operations here, either by conducting a noise test or receiving an administrative waiver.

What is the noise test process?

Carrier must submit a package of information about the aircraft to be qualified including proposed operating weight, specific procedures, documentation substantiating aircraft's ability to meet noise limit. Package reviewed by airport staff and acoustical consultant.

If approved, carrier can proceed with test which consists of five (5) arrivals and five (5) departures at representative GTOW, and must be completed in the same day.

When can an administrative waiver be requested in place of a noise test?

An incumbent carrier can request an administrative waiver in place of a noise test if the aircraft type is currently in use, or has previously been used, by another incumbent carrier, and its noise levels can be used to document that the aircraft is capable of operations at JWA within the noise limitations. An administrative waiver is **not** permitted for new entrant carriers. All new entrant carriers must comply with the above-mentioned noise test process.

Types of Capacity Allocated

What Types of Operating Capacity are Allocated?

- Commercial Air Carriers are allocated capacity in the form of “Average Daily Departures” (ADDs) & Seats
 - 1 ADD = 365 departures
 - 2 Types of ADDs: “Class A” & “Class PE” (Permanent E)
 - Class PE ADDs were obtained by trading-in Class A to max of 14 [1 A=2 PE]
- Seats
 - To support Class A and Class PE ADDs
 - Class E – additional flights can be added using Class E seat pool
- Commuter Air Carriers are allocated capacity in the form of “Passengers”
- Remain Over Night (RON) parking spaces

Types of Capacity Allocated (continued)

Long-Term (Through December 31, 2025)

- Regular Average Daily Departures (ADDs)
Class A and Class PE

Short-Term (Annually)

- Supplemental ADDs
 - ✓ County-controlled ADDs
 - ✓ Temporary Returns from other Air Carriers
 - ✓ Availability is Variable
- Seats
- Passengers (Commuter only)
- RONS

Capacity Allocation – Usage Requirements

During Any	Min. Use % (ADD, Seat, and Passenger Capacity)
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Calendar Month	50%
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Calendar Quarter	70%
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Plan Year	90%
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During Any	Max. Use % (ADD, Seat, and Passenger Capacity)
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Calendar Quarter	115%
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3-Consecutive Quarters	105%
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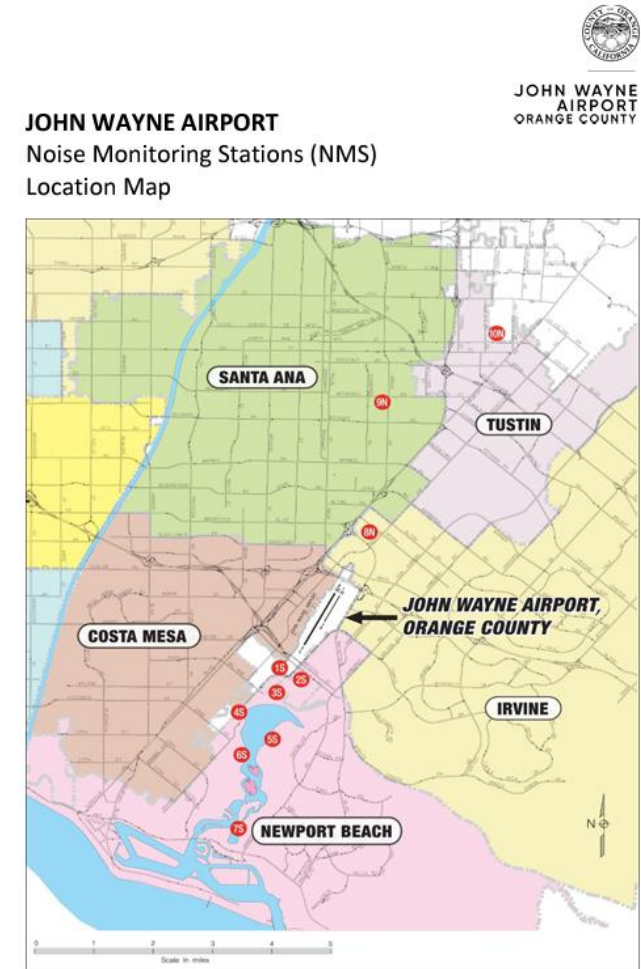
Plan Year	100%
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During Any	Min. Use % (RON)
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Calendar Month	80%
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JWA Noise Monitoring

- The nation's first permanent aircraft noise monitoring system (Ecolog I) was installed at JWA in 1971
- The Noise Monitors have been updated multiple times; most recently in 2015
- JWA has 10 Noise Monitoring Stations (NMS)



Noise Monitoring System



Operating Hours

Permitted Commercial Operating Hours

	Departures	Arrivals
Monday-Saturday	0700 to 2200	0700 to 2300
Sunday	0800 to 2200	0800 to 2300

Permitted Cargo Operating Hours-Aircraft

	Arrive No Earlier Than	Ready for Departure	Depart No Later Than
Monday-Sunday	1600	1930	1945

Permitted Cargo Operating Hours-Ground Service Equipment

	GSE Ramp Staging No Earlier Than	GSE Off Ramp
Monday-Sunday	1545	1945

* Both Class A and Class E operations are subject to the same operating hours

Air Carrier Curfew Exemptions

Curfew extension requests subject to the following requirements:

- Contact Airport Ops to request extension prior to curfew
- Be one of four reasons:
 - ✓ Weather
 - ✓ Unscheduled Mechanical
 - ✓ Air Traffic Control (ATC)
 - ✓ Emergency Delay must occur at originating airport, SNA, or destination airport.
- Segment to/from SNA
- Curfew extension request must be for a specified period of time (with a maximum of 30 minutes depending on circumstances)
- File curfew report w/in 48 hours
- Submit supporting documentation w/in 10 days

Air Carrier Curfew Exemptions (Continued)

Enforcement:

- Time is as measured at any Noise Monitoring Station
- Times over the monitors are verified by staff to ensure within the granted extension time
- Airside logs are reviewed for curfew extensions and any other notes about early or late operations
- Curfew checklist submitted by Airport Ops
- Early arrivals before operations hours are not permitted

Penalties:

Violations 1-5 = **\$2,500**

Violations 6-10 = **\$3,500 - \$5,000**

Violations >10 = **\$5,000 - \$10,000**

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CURFEW REPORT

TO: Access & Noise Office EMAIL: jwaano@ocair.com FAX: (949) 252-5178

Per Section 8.5.2 of the Phase 2 Commercial Airline Access Plan, the following curfew report is submitted.

Carrier: _____
Flight Number: _____
Date of Operation: _____
Operation Type: ☐ Arrival ☐ Departure
Actual Arrival/Departure Time: _____
Aircraft Type: _____
Origin/Destination: _____

Acceptable Reasons for Delays:
☐ ATC ☐ Mechanical
☐ Emergency/Security ☐ Weather

Where Did The Cause Of The Delay Occur?:
☐ **Arrival** - Delay at Originating Airport (Leg/Stop Immediately Before JWA)
☐ **Arrival/Departure** - Delay at JWA
☐ **Departure** - Delay at Destination Airport (Leg/Stop Immediately Following JWA)

Supporting Document: ☐ Attached ☐ Intent to submit within 10 days of curfew operation

Name of Airline personnel requesting curfew extension: _____
Name of JWA personnel authorizing curfew extension: _____
Date and Time called for curfew extension: _____
Curfew extension length (minutes): _____
Describe in detail the specific circumstances for this request:

Signature: _____ Date: _____
Station Manager/Carrier Representative

Curfew Report Must Be Submitted To Access & Noise Office Within 48 Hours Of Operation

Revised 8/3/2022

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Fly Friendly Program



Launched in 2022, John Wayne Airport's Fly Friendly program helps care for our surrounding communities by providing education to General Aviation jet operators and celebrating their voluntary efforts to reduce measurable noise and offset impacts on the environment through an annual awards process.

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Fly Friendly Scoring Elements

Scoring is based on the following four elements:

(Detailed scoring methodology is available at www.ocair.com/FlyFriendly)

Quietest Departures: Awards points to operators based on the amount of measurable noise on departure over the full calendar year, as verified by the Airport's noise monitoring system data

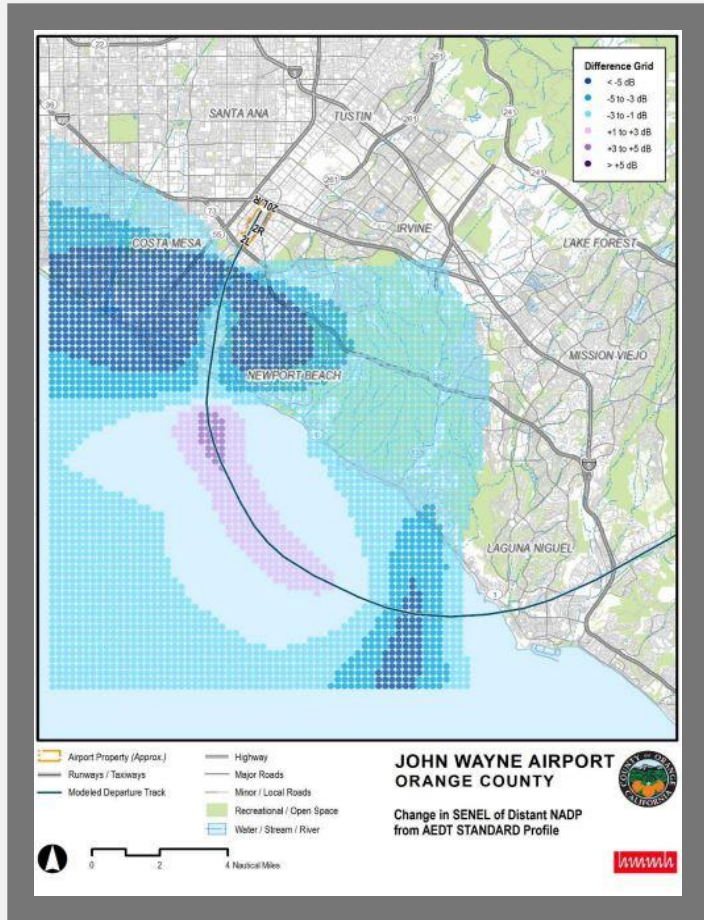
Ways to achieve reduced noise include, but are not limited to:

- Technical modifications to existing aircraft and acquiring/utilizing newer, quieter equipment
- Operational modifications such as choosing to fly in accordance with the quietest GA jet departure procedure for JWA: the National Business Aviation Association's (NBAA) Standard Noise Abatement Departure Procedure (NADP)
 - If pilots voluntarily fly this procedure, community members under and near the flight path between JWA and the shoreline will experience less noise

Quietest Departures (continued)

Instructions for Pilots

1. Climb at maximum practical rate not to exceed $V_2 + 20$ KIAS (maximum pitch attitude 20 degrees) to 1,000 feet AAE in takeoff configuration at takeoff thrust.
2. At 1,000 feet AAE, begin acceleration to final segment speed (VFS or VFTO) and retract flaps. Reduce to a quiet climb power setting while maintaining a rate of climb necessary to comply with IFR departure procedure, otherwise a maximum of 1,000 FPM at an airspeed not to exceed 190 KIAS, until reaching 3,000 feet AAE. If ATC requires level off prior to reaching NADP termination height, power must be reduced so as not to exceed 190 KIAS.
3. Above 3,000 feet AAE resume normal climb schedule with gradual application of climb power.
4. Ensure compliance with applicable IFR climb and airspeed requirements at all times.

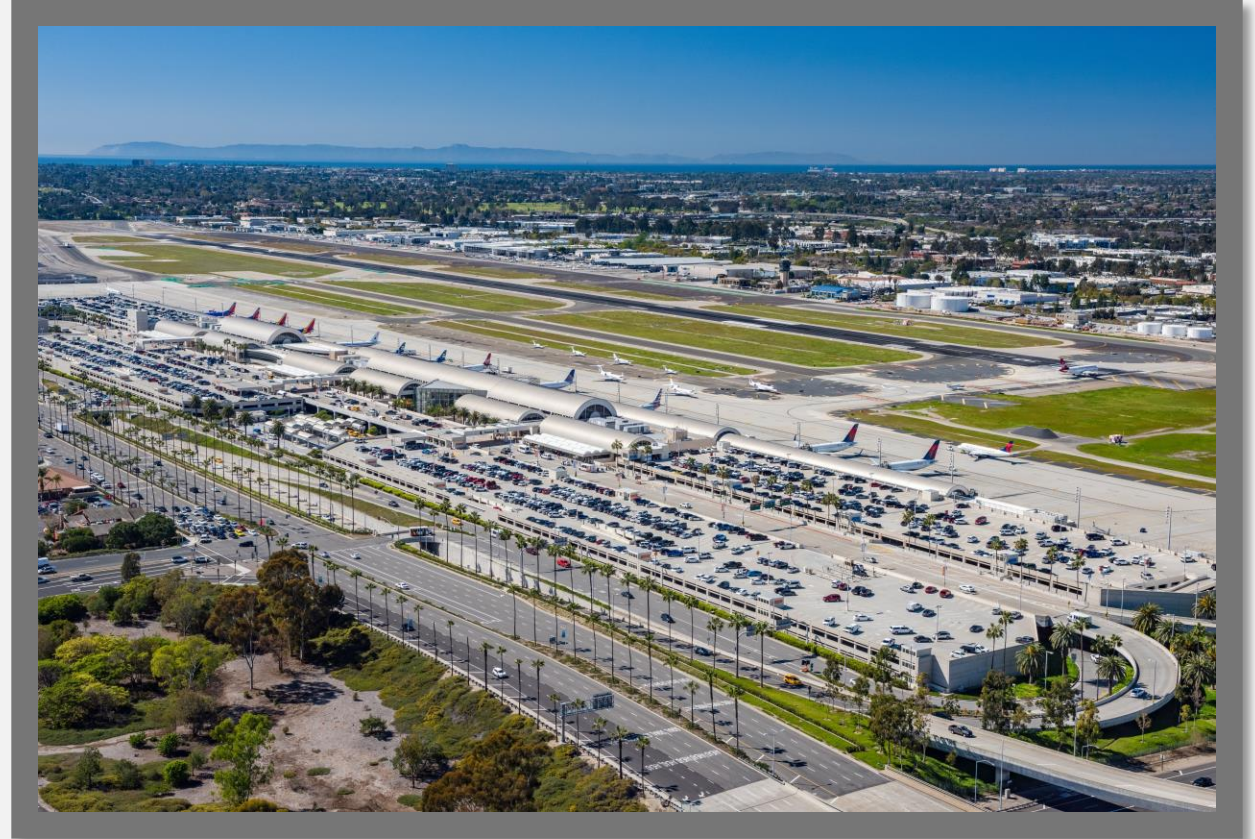


****Noise abatement procedures should only be used when consistent with the safe operation of aircraft***

Nighttime Noise Reduction

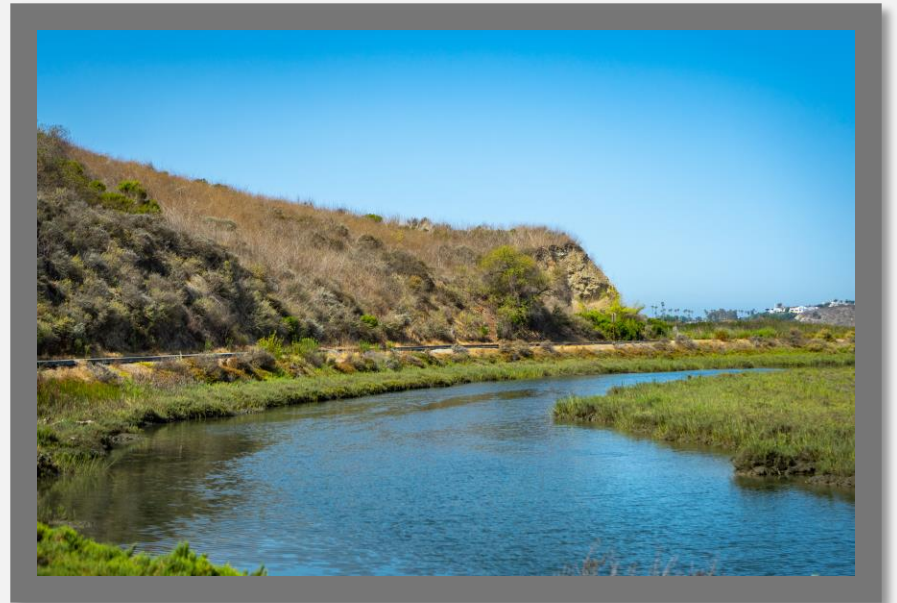
GA aircraft can operate at JWA 24 hours a day, as long as they comply with applicable noise limits. This component of the program awards points to GA jet operators who voluntarily reduce their number of flights, when safely possible, during the nighttime/early-morning hours of:

- Departures: 10 p.m. to 7 a.m. Monday through Saturday and 8 a.m. Sunday
- Arrivals: 11 p.m. to 7 a.m. Monday through Saturday and 8 a.m. Sunday



Environmental Stewardship & Sustainability

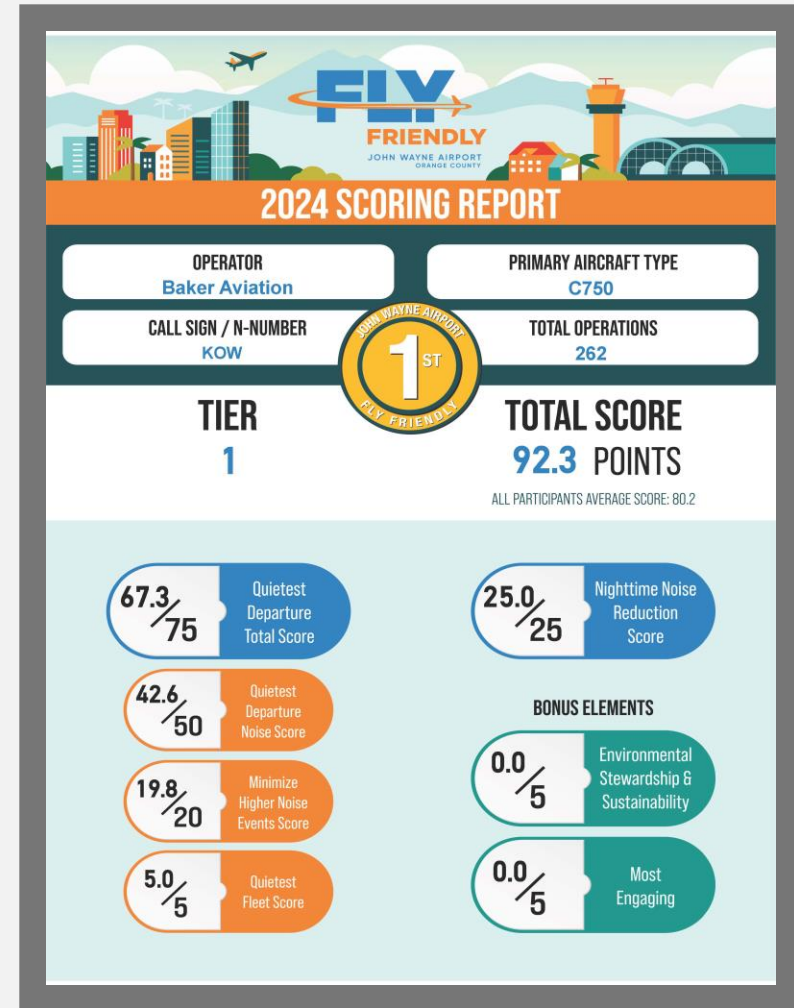
- Awards bonus points to operators who contribute up to \$4,500 per calendar year to support:
 - The restoration of native wetland habitats in the Newport Bay Ecological Reserve and Nature Preserve through the Newport Bay Conservancy
- Keeping these beautiful, biologically-diverse ecosystems healthy helps provide all Orange County residents with cleaner air, water and abundant recreational opportunities while offsetting some pollution impacts from aircraft



Most Engaging

Awards points to GA jet operators who voluntarily implement outreach and education such as: noise abatement training; distribution of Fly Friendly program toolkit materials; and/or attendance at any of the following:

- JWA's Quarterly Noise Meetings
- JWA Fly Friendly Working Group meetings
- City of Newport Beach's Aviation Committee Meetings
- Any Orange County community meeting focused on aviation impacts





For more information:

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