AWG Airport Working Group of Orange County, Inc.

VIA ELECTRONIC & U.S. MAIL
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November 20, 2018

Ms. Lea Choum
3160 Airway Avenue
Costa Mesa, CA 92626

Re: General Aviation Improvement Program - Draft Programmatic Environmental Impact Report (SCH No. 2017031072)

Dear Ms. Choum:

We submit the following comments regarding the General Aviation Improvement Project (GAIP) and related Draft Environmental Impact Report (DEIR), including Alternative 1.

Introduction

The Proposed Project for General Aviation Improvements and Alternative 1 would both result in a limited control facility environment which will allow long-term FBO leaseholders significant flexibility to adapt the space to their own needs based on economics and optimization of square footage of aircraft storage capacity. Appendix C and D of the DEIR provide forecasts and estimates of GA aircraft local storage demand, but the only forecast analyzed for environmental impact was a single conservative baseline forecast. In the baseline forecast, applied to the constrained forecast scenario, there will be a significant increase to the number of corporate, business, or private jet operations, which will negatively impact the quality of life of local residents living near the departure tracks. But to obtain a true potential environmental impact, a broader analysis of the impact using a potential higher capacity utilization (above the baseline levels) by the entrepreneurial and innovative leaseholders is needed. This should be based on some constrained version of the high growth rate from § 6.1.3 Table 13 in Appendix C which shows a much higher growth rate.

In addition, the aircraft operations forecast must also include worst case scenario daily/weekly/ yearly average operations based on a survey of corporate and business aircraft owners within the "competitive market area (CMA)" and SNA area. No survey results were cited in the EIR 627, yet aircraft utilization by class of equipment is available from a number of nationally recognized credible sources. Environmental impacts must be quantified based on a range of possible operations in alignment with the higher, aggressive forecast on market demand.

Further, the recent introduction at John Wayne Airport of scheduled charter operations at the existing ACI facility has proven quite successful showing a demand for this service. The new FBO tenants, with the proposed vastly expanded service capabilities for customs, immigration, and security would significantly increase the attractiveness of John Wayne Airport versus other airports in the CMA, both for based and itinerant operations. Although the passenger counts are controlled within the Settlement Agreement (SA), the manner of operations for GA is not as strictly controlled as commercial. Would late departures (after the commercial curfew or before 7am) become common? The DEIR 627 did not forecast an increased % in transit (non-hangered) operators use of John Wayne, but with the new large central terminal with services, there is a strong likelihood this higher number of transit operations would occur. This was not analyzed for noise or pollution impact.

Comments based on the DPEIR 627 base document-

1. BASELINE – The baseline for analysis reflected in the EIR is 2016. However, CEQA requires that, under normal circumstances, the baseline be contemporaneous with the publication of the Notice of Preparation ("NOP") for the project. 14 C.C.R. § 15125(a). If the date of NOP publication is not consistent with the 2016 baseline chosen for the EIR, please explain the choice of 2016 as a baseline.

2. NOISE – The EIR noise analysis, based on 2016 "existing" project data fails to take into account the cumulative noise impacts of the Southern California Metroplex Project. While the EIR, § 4.7.8 concedes the "final procedures in the Metroplex" were implemented in April 2017, thus concluding the Metroplex project's implementation, the EIR also dismisses the impact because the procedures were purportedly "modified three times in 2017." Those changes do not, however, excuse the absence of the noise data after implementation of the Metroplex project as the existing noise environment.

Moreover, it should be noted that the AEDT air quality/noise model was not implemented in 2016, but, rather, in March 2012 (see 77 Fed.Reg. 18297-98, 3/27/12), although in an earlier form, AEDT2a. Thus, the EIR's claim that a "direct comparison of the program EIR to the data presented in Final EIR 617 [prepared for the last Settlement Agreement amendment] cannot be made" is entirely unsupported.

3. AIR QUALITY – The EIR's limitation on the analysis of air quality impacts to those of general aviation only is in error. To the extent the EIR contemplates the possibility that the project's improvements will allow the projected facilities to accommodate charter and commuter aircraft, as well as traditional piston and turbine general aviation aircraft (see, e.g., EIR, § 3.6.1, p. 3-10), the air quality impact of charter and commuter aircraft must also be included in the evaluation of air quality impacts.

4. CAPACITY INCREASE – The EIR discloses that "transient aircraft parking areas are excluded from the capacity analysis," § 3.6.2, p. 3-17, fn. 24, even though one of the results of the project is the potential for a dramatic increase in transient aircraft arrival and departure, including access to a new international general aviation terminal, and accommodated by sharing of tie-down space with based aircraft. The noise and air quality impact of that increase in potential transient operations remains unevaluated.

Comments based on the Appendices

Since the DPEIR document findings were largely based on the detail contained in the Appendices and related Tables and Figures, the following comments are directed to the assumptions, forecasts, and estimates continued in these Appendices, the foundation of the findings.

1. **Appendix B- General Aviation Opportunities Facilities Layout Report** comments

   a. Key operations forecasts for the Proposed Project and Alternative 1 DEIR impact were based on the layout detail in this Appendix prepared by AECOM. Table 1 Facilities Matrix Evaluation shows total full service FBO hangar space in the Proposed project would be 199,320 SF with 30 aircraft in hangars (32 on Apron) and 299,640 SF in Alternative 1 with 45 aircraft in hangars (& 47 on Apron). How this space will be used by long lease term FBO's cannot be mandated by John Wayne Airport administration. Quoting from Appendix B § 3.1-

   "When comparing the capacity of the FBO facilities, it should be noted that the number of "aircraft in hangars" and the number of "aircraft on apron" is not an absolute. This is because the type and size of aircraft parked at a busy FBO facility is wide ranging and can change frequently…".

   Referencing Table 25 of Appendix C §6.5 (General Aviation Jet Aircraft with over 500 Operations in 2016) shows common GA aircraft as large as the Gulfstream V/G500, with a wingspan of 91 feet 6 in. and a length of 91ft 2 in., as well as a Cessna Citation CJ1 with a much smaller footprint of 46 ft. 9 in. wingspan and length of 42 ft. 7 in. Hangar use for different fleet mixes of this variety in size would have a major impact of the number of aircraft capacity and hence operations, to be expected. FBO's driven by economics, may determine a different mix with more mid-size business jet aircraft would yield higher profits. There could be as many as 20-25% more business jets housed under these scenario's so the incremental business jets on site under the GAIP could be significantly higher than the 73 forecasted in the proposal or 76 forecasted in the Alternative 1 scenario.

   The issue is the DEIR did not analyze the noise, pollution, or other community impacts for significance based on different combinations of housed large business jet aircraft (and large aircraft tie downs). Since the AECOM analysis states this as a real variable, the DEIR must take into consideration different local hangered aircraft populations at the proposed FBO's to ensure that even at a higher aircraft capacity, there would not be a significant impact, or, it must state a mitigation program.

   The impact of a substantial increase in incremental business jet operations is made worse from a community perspective because business jet departures follow the same FAA SIDs departure tracks used by commercial airlines at SNA, i.e., PIGGN, HHERO, FINNZ, etc., using avionics instruments. The same neighborhoods that are impacted by commercial aircraft will be impacted by noise and pollution under the same departure tracks, whereas the large number of displaced, smaller GA prop/piston engine aircraft are fanned after takeoff along different visual paths. This clearly is an increase in noise for residents near NM5, NM6, and NM7 who are not under the flight path of prop/ piston aircraft.

Different hi/lo fleet mixes based on aircraft size other than the single mix of aircraft fleet operations shown in Table 10 in Appendix H § 6.1.1 (OPERATIONS, FLEET MIX, RUNWAY USE AND FLIGHT TRACKS) must be analyzed to truly understand the potential environmental impact.

2. **Appendix C- General Aviation Forecasting and Analysis Technical Report** comments

   a. In §7. Summary, Table 28 (SNA Forecast Summary), there are three forecasts for based aircraft and annual operations based on the fleet forecast at each forecast level- Baseline, Low Scenario, and High Scenario. The level of aircraft capacity and operations then taken forward in the constrained forecast of Appendix D was: 1- not adequately explained for the purpose of external evaluation, and, 2. only a single forecast level was defined in the constrained forecast for both the Proposed Project and Alternative 1, whereas already noted by the document's authors, an exact use of the hangars cannot be an absolute.
   b. A key component of the environmental impact analysis is the actual assets that will be generating the impact, specifically, the aircraft fleet using the proposed facilities. §6.5 of Appendix C Design Aircraft, provides details on sizes of general aviation aircraft (Table 25), and Table 15 provides 2016 data on average landings per active based GA aircraft types. Corporate aircraft are shown to have averaged 230-240 landings in 2016, which would equate to 2 times that number for operations (takeoffs and landings) of local based aircraft. That means each corporate aircraft may have 460-480 "operations" per year and the Proposal has 73 jet aircraft and Alternative 1, 76 jet aircraft. This would calculate to 35,040 – 36,480 annual operations by corporate / business aircraft per year, approximately what was shown in the noise impact tables in Appendix H. However, no analysis was done based on a range of values of a different mix of fleet which may increase the number of hangered / based jet aircraft to higher numbers based on facility usage by the FBOs. In addition, some corporate jet owners use their aircraft much more frequently that the national average with 1.x – 2^{+} takeoffs per day, Monday through Friday. Such scenarios seem possible and which may have a significant environmental impact in noise and pollution. A range of forecasts of jet fleet mix, total based aircraft and annual operations above one takeoff a day needs to be completed in the final EIR.

3. **Appendix D – Capacity Analysis and General Aviation Constrained Forecasts** comments

   a. As mentioned in comments on the facility configuration (Appendix B) and the unconstrained forecast of GA local demand (Appendix C), the explanations given in Appendix D for how this information was used to create -
      i. essentially a single GA facility capacity footprint (Table 3) and aircraft fleet mix for the Proposed Project (Table 4)
      ii. and similar scenarios for Alternative 1 in Tables 5 and 6.

      was severely lacking enough clarity to support the assumptions or adequate grounds to challenge. The link from each of these analyses and how the ground footprint was designed as a high-level capacity layout must be detailed. Otherwise, the key results defined in Tables 4 and 6 can be challenged as this is the foundational level of information on which the EIR submittal should be evaluated for adequacy.
   b. Just as was shown in Appendix C, more than a single set of GA aircraft-based assumptions must be evaluated in the "Capacity Analysis…". A "what if" higher jet

aircraft base assumption, based on a potential FBO's ingenuity at final floor space configuration, must be evaluated in both the Proposed and Alternative 1 projects. The jet aircraft will create significantly more noise and pollution over a concentrated area (already impacted by commercial airlines) than the displaced small aircraft weekend fliers.

c. Transient or itinerant operations are hardly analyzed at all in any of the analysis. The key issue raised here is whether the much more accommodating services (customs, immigration, security, and other) will create a competitive advantage over other CMA facilities in Southern California. Even corporate aircraft based at other airports, may begin to use SNA to disembark international passengers due to the new conveniences, with the crew then flying the aircraft to its base location. This increase may equate to more than one cycle (takeoff + landing) per business event, significantly multiplying the GA business operations above the forecast in the DEIR, and, the additional itinerant aircraft would likely be jet powered, with negative noise and pollution impacts per event. Analysis of the attractiveness of SNA under the Proposed Project and Alternative 1 to generating a significant increase in transit and itinerant business must be addressed. A survey of so ca based business jet owners on this issue would be a good first step, or a look at a similar upgrade in another US airport to see the CAGR impact of operations.

d. The likely growth in scheduled charter operations using the new FBO facilities was not addressed adequately, and somewhat disregarded since the passengers would be counted under the Settlement Agreement. However, GA operations are not controlled as to restrictions placed on commercial carriers, such as nightly curfews and class of aircraft. LAX has commercial carrier departures after midnight and also very early in the morning departures for South America and the East Coast. SNA with new services, may be able to offer similar options through scheduled charters. Such potential scenarios were not studied at all and must be addressed, particularly with noise and pollution issues.

4. Appendix H- Noise Analysis Technical Report comments

a. The baseline date used for the project completion date of 2026 includes assumptions which can be disputed by discussions with local stakeholders. Specifically, there is a major assumption on the projected noise levels in the no-project scenario based on the Settlement Agreement increase in commercial activity, but with a mix of commercial aircraft that is much higher in new quiet equipment (Boeing Max and Airbus NEO). Table 15 in Appendix H shows the large commercial fleet operations to be 32,326 of the total of 114,100, or 28%. This was based on a simplistic assumption of fleet activity aligning with the projections of Airbus and Boeing on deliveries of these aircraft to the major carriers over that time period. In fact, there are commercial passenger market reasons that this severely overstates the use of these aircraft at John Wayne Airport. This is based on the origin and destinations (schedules) of the carriers operating at SNA today and passenger forecasts. The use of these aircraft at John Wayne may be less than half the projected operations shown in Table 15, and if this is the case, the incremental impact of the additional GA jet aircraft operations versus no project may be significant. A more studied and defensible set of assumptions for all aircraft types must be included in the DEIR for impact evaluation.

b. As stated in other comments to other Appendices, the forecast of aircraft operations for the corporate / business jet increased hangar and apron tie-down aircraft appears understated at roughly one cycle per day, Monday through Friday. Many corporations and businesses use aircraft utilization as the key ROI metric for

management or Board of Director capital approval. If that is a standard metric which is likely measured quarterly by the CFO, one cycle (one takeoff & landing) seems marginal in producing a solid ROI. Large corporations have multiple aircraft and staff crew on payroll and try to keep the planes in the air as much as possible. Many times they can be used as a shuttle service for senior management to ferry people to and from job sites. Such use would drive the utilization much higher and could easily exceed 2-3 cycles per day on a 24-hour clock. This needs to be addressed in the DEIR by looking at other large business jet airports and what the activities are.

c. Mid-sized and large jet engine powered business aircraft fly the same departure procedures as commercial airlines, whereas smaller aircraft like this being displaced generally "fan" right or left immediately after takeoff. The result of the Proposed Project and Alternative 1 will significantly increase the noise and pollution for the community members under the commercial departure procedures. The CNEL contours shown in the Figures of Appendix H do not adequately address the incremental impact on residents near noise monitors 5,6, and 7, and with the error in commercial fleet population noted in comment **IV.b.** overstating the use of quiet aircraft (MAX and NEO) in the base assumptions for 2016, this is magnified. A special analysis should be done within the DEIR to address this incremental impact in a more meaningful way than shown in Tables 16 and 17 of Appendix H.

5. Appendix E – Air Quality Technical Report comments

a. The comments and issues of concern are based on the displacement of many smaller aircraft with limited operations with larger business fleet aircraft that burn kerosene, fly the same departure tracks as commercial aircraft, and have micro particle effluent over neighborhoods. The analysis shown in Appendix E could only be evaluated by professional air pollution control experts and leaves the layman at a significant disadvantage. However, three concerns must be addressed- 1- the likely understatement of business jet operations as noted in other comments in this document and shown in Tables 18 and 21 of Appendix E. If business jet operations were increased by 20-30%, what impact would that have on the results shown in Tables 20, 23, 24, and 25? 2- the effluent volume of different pollutants based of different fleet mix operations scenarios, and, 3- the cumulative impact of pollutants from older aircraft versus the unrealistic assumption of more efficient MAX and NEO aircraft as a % of total operations.

b. The detrimental impact of a highly likely incremental transit and itinerant operations volume due to the improved facilities at John Wayne FBOs terminal services was not addressed at all. Some impact of the value of customs, security, immigration, and ambiance, must be analyzed as to how many additional daily itinerant operations there will be post completion of the anticipated facilities improvement. Experiences at other airports and detailed surveys by 3rd parties would create a baseline for analysis and a re-issue of the DEIR.

As shown in the comments above, the GAIP DPEIR document included a number of key questionable assumptions for the future aircraft operations volume and impact under the Proposed Project and Alternative 1 versus no project. The assumptions used in the Appendices had a significant impact how determinations were made and serious issues with these assumptions or forecasts make determinations on environmental impact moot until addressed.

Conclusion

As pointed out in this document, the Draft EIR 627 has serious deficiencies which make a final determination of environmental impact on the Proposed Project or Alternative 1 insufficient without further analysis. As a further example, the EIR reveals that the Project will result in a dramatic diminution in the smallest and currently quietest type of aircraft, the single and multi-engine fixed wing piston, see Table 5-1, p. 5-7, and a substantial increase in turbine engine aircraft. *Id.* Nevertheless, the EIR fails to analyze, or even mention, the impact of the displacement of those smaller aircraft, including the surface traffic and air quality impacts of users having to access them at far flung airports throughout the region. This omission, as well as the other issues detailed in our comments, requires further action.

Sincerely,

Mel Beale
President, AWG Board of Directors