

**Part 150 Comments to Consultants' Citizen Advisory Committee and Technical Advisory  
Committee Presentation of May 28, 2020  
and Proposal for Modified Equivalent Lateral Spacing Operations (ELSO) Option**

**Anthony M. Stiegler, CAC Member, and Chris McCann, TAC Member  
Quiet Skies San Diego  
Quiet Skies La Jolla  
July 20, 2020**

---

## **I. Introduction**

These comments are made by Citizen Advisory Committee (“CAC”) member Anthony M. Stiegler and Technical Advisory Committee (“TAC”) member, Chris McCann of La Jolla and Quiet Skies La Jolla, supported by Dr. Matthew Price of the Airport Noise Advisory Committee (“ANAC”) and Quiet Skies La Jolla.

We thank the San Diego County Airport Authority (“SDCRAA”) and its consultants for their substantial work on the proposed alternatives presented in the PowerPoint (“PPT”) presentation at the May 28, 2020 CAC and TAC meetings, as supplemented by their June 25, 2020 CAC meeting clarifications. We further thank the SDCRAA for providing the requested data files from the consultants that accelerated the time for these comments and the associated suggested Equivalent Lateral Spacing Operations (“ELSO”) proposal.

We appreciate the consultants’ and SDCRAA’s acknowledgements that the PPT presentations were preliminary, that informed community feedback and ideas are sought, and that additional modeling is anticipated. We present our comments and requests for additional modeling here in the spirit of a win/win/win/ for the communities impacted by noise around the San Diego International Airport (“SAN”), the SDCRAA, the Federal Aviation Administration (“FAA”) and the airlines who use our airport.

These comments fall into two categories:

- Our proposal for a modified ELSO implementation leveraging the Performance Based Navigation (“PBN”) objectives that are the heart of the FAA’s NextGen implementation; and alternatively;
- Our comments about the existing Alternatives 1A, 1B, 1C, 2A, 2B and 4 as presented on May 28, 2020 and clarified on June 25, 2020.

## II. The SDCRAA Should Model and Advance a Slightly Modified Equivalent Lateral Spacing Operations (“ELSO”) Proposal to the FAA

### A. The SAN Performance Based Navigation ELSO Report by ABCX2

We privately commissioned a study and set of recommendations for the San Diego International Airport (SAN) by ABCX2, an aeronautical engineering flight path and noise consulting firm, whose members worked with the FAA and the Atlanta Hartsfield-Jackson International Airport on the Performance Based Navigation System NextGen Metroplex ELSO implementation in Atlanta (KATL) addressing optimum operational capacity and surrounding community noise mitigation.

We present here ABCX2’s and our proposed ELSO solution for SAN, which is based on the SDCRAA consultants’ Alternatives 2A and 2B. Our proposal would reduce noise for the impacted communities around SAN while simultaneously optimizing operational throughput and capacity, all without increasing workload or burden on Air Traffic Control (“ATC”).

Four central design principles underly this proposal: (1) avoiding any negative impact on the airport’s operational throughput, capacity or safety concerns; (2) dispersing noise and avoiding concentration over any single community; (3) not shifting noise from one community to another; and (4) making effective use of the Pacific Ocean offshore to minimize noise on communities beyond the 65 CNEL.

The core recommendation is to disperse departures off Runway 27 at SAN across three distinct paths, thereby reducing the noise impact on any one of the impacted communities. The proposal is to use three Standard Instrument Departure protocols (“SIDS”), each separated by 10 degrees, graphically depicted below in Fig. 9, and detailed in the attached ABCX2 report, entitled *“Noise and Operational Considerations for the San Diego International Airport Part 150 Study”* hereinafter referred to as the “SAN-PBN ABCX2 ELSO Report”:

Fig. 9 from the SAN-PBN ABCX2 ELSO Report:



*Fig. 9 – ABCx2 Proposed Tracks (Three tracks in red) within the current splay. Blue shaded area includes existing CWARD/PADRZ SIDs and yellow is the additional area covered by the existing ECHHO/MMOTO SIDs.*

The SAN PBN ABCX2 ELSO Report SIDs are designed to the following specifications:

1. ZZOOO remains unchanged with a VA/DF initial leg construction resulting in a runway heading (275-degrees) departure to 520 feet MSL then direct to the JETTI waypoint. Per prior proposals in this Part 150 Study, the JETTI waypoint could be extended further offshore to mitigate noise for the Point Loma community, which is a modification that we support.
2. New CWARD/PADRZ SIDs are designed with a VI/CF initial leg construction. Initial heading is 275 degrees to 1.02NM from DER then intercept course 285-degrees to the WNFLD-NEW waypoint.
3. New ECHHO/MMOTO SIDs are designed with a VI/CF initial leg construction. Initial heading is 275 degrees to 1.02NM from DER then intercept course 295-degrees to the LANDN-NEW waypoint.

When taken together the three ELSO tracks proposed in the SAN PBN ABCX2 ELSO Report promote operational efficiency at SAN, are well within the current splay of aircraft, disperse air traffic over and between all of the impacted communities, while simultaneously mitigating noise exposure both north and south of the Mission Bay Jetty inlet.

The change in overall track miles for the proposed ELSO SID designs are negligible when compared to existing SID designs. (See Table 1 Below from the SAN PBN ABCX2 ELSO Report)

SAN RNAV SIDs - Track Mile Comparison

Procedure	Existing	ABCx2	Difference	Route – Runway to Common Fix
ECHHO	17.22	17.37	0.15	ECHHO
MMOTO	17.22	17.37	0.15	ECHHO
CWARD	33.13	33.17	0.04	GYWNN
PADRZ	33.13	33.17	0.04	GYWNN

This ELSO proposal can be implemented without any increase in workload to the Air Traffic Controllers while maintaining FAA Safety Standards, remaining within prescribed TERPS Criteria, and operating within the guidelines of FAA Orders 7110.65 and 7210.3 as amended. Finally, the offshore benefits of these proposed ELSO SIDs are helpful, moving noise further away from the coast over the ocean without shifting it to other communities. See for example Fig. 3 of the SAN ELSO ABCX2 Report, depicting the CWARD/PADRZ SIDs:



Fig. 3 – Offshore Benefits



The SAN PBN ELSO ABCX2 Report includes the full TARGET Distribution Packages that would be required for implementation, ELSO background materials and portions of the FAA Reauthorization Act of 2018 contemplating and requiring just this type of analysis and recommendation for airports like SAN using the NextGen Performance Based Navigation System.

This type of ELSO solution has already been implemented at several airports within the United States and is the preferred state of the art associated with NextGen's Performance Based Navigation system.

In light of all of these operational, noise mitigation and federal policy reasons, we respectfully request that this ELSO proposal be seriously considered and modeled by the SDCRAA's consultants. We offer to make the ABCX2 consultants available for further explanation and consultation at a subsequent CAC/TAC meeting and/or with the SDCRAA's consultants. We urge that this proposed ELSO plan be advanced in this Part 150 Study.

## B. ELSO is a Preferred and Approved FAA National Air System Solution to Leverage the Advantages of the NextGen Performance Based Navigation System

In 2014, the FAA prioritized Performance-Based Navigation (PBN) capabilities of its Next Generation Air Transportation System (NextGen) and committed to implementing high-priority innovations within the next three years. In 2015, the commitments included the issuance of a national standard for PBN-enabled Equivalent Lateral Spacing Operation departures and implementations at airports throughout the United States National Airspace System (NAS). Beginning in 2011, flight validations of ELSO-based reduced-divergence procedures at The Hartsfield-Jackson Atlanta International Airport (KATL) demonstrated operational benefits and validated the ELSO concept for the development of the standard. The standard enables the NAS-wide use of PBN departure procedures with a reduced minimum divergence of 10 degrees instead of the 15 degrees currently required to conduct simultaneous parallel and successive departure operations. See, *“Development and Operational Transition of the First PBN-Enabled Departure Separation Standard”*, Ralf H. Mayer, Dennis J. Zondervan, Center for Advanced Aviation System Development, The MITRE Corporation, McLean, Virginia, Brian M. Crow, James Allerdice, Jr., Federal Aviation Administration, Atlanta TRACON, Peachtree City, Georgia, H. Madison Walton, Jr., Federal Aviation Administration, Washington D.C., 2015 Integrated Communications Navigation and Surveillance (ICNS) Conference, April 21-23, 2015, attached as Appendix 3 to the SAN PBN ABCX2 ELSO Report herein.

Performance-Based Navigation serves as a cornerstone for transforming the United States National Airspace System from a system that primarily relies on ground-based navigation and radar surveillance to a satellite-based system. To further capitalize on PBN-enabled capabilities and enable safe implementation of more closely spaced flight paths, the FAA committed to developing standards for reduced separation and divergence See, *Id. and FAA, October 2014 NextGen Implementation Plan, Washington, D.C.*

The commitments include the issuance of a standard for PBN-enabled ELSO departures and ELSO implementations at airports throughout the United States. *See SAN PBN ABCX2 ELSO Report and FAA, October 2014 NextGen Priorities Joint Implementation Plan Executive Report to Congress*”.

Applications of the ELSO standard deliver benefits by providing PBN procedure design options to more effectively address terrain, obstacle, or airport noise sensitivity constraints and enable diverging operations to increase departure capacity, reduce departure delay, decrease fuel burn, and lessen aircraft emissions. *See SAN PBN ABCX2 ELSO Report at 1*. The SAN PBN ABCX2 ELSO Report describes the process applied to successfully transition ELSO into operation at the Atlanta Hartsfield Field Airport (KATL) as the first PBN enabled departure separation standard into the National Air System. *See id, at 1*.

ELSO improves economics at implementing airports. A 2012 MITRE Corporation report commissioned by the FAA assessed the annual airport operator benefits associated with implementing ELSO in Atlanta at approximately \$20M. *SAN PBN ABCX2 ELSO Report at 6*.

ELSO is safe and the FAA has already implemented a “Document Change” to its Air Traffic Control Handbook, FAAO JO 7110.65, addressing and accepting ELSO:

“In 2012, FAA commenced a multi-phased initiative to update its Air Traffic Control Handbook, FAAO JO 7110.65. Update recommendations included changes to Section 5-8-3 (Successive or Simultaneous Departures) to enable NAS-wide application of the ELSO standard. The FAA tasked MITRE CAASD to perform a NAS-wide survey of candidate implementation airports. The survey results suggested the potential for beneficial application of reduced-divergence departure operations at other airports and supported the decision to propose a national policy change. In 2013, the FAA tasked MITRE CAASD to develop a single divergence requirement for uniform application throughout the NAS. The adoption of a single divergence requirement forgoes the complexities of leveraging runway layout characteristics and solely capitalizes on PBN-enabled improvements in navigational performance. FAA technical review by AFS-400 determined a single reduced value of 10 degrees appropriate for all PBN (RNAV 1) departure operations and for achieving a level of safety equal to or better than that experienced by conventional departures using 15 degrees divergence. A SRMP was convened in 2014 to analyze the hazards and unintended consequences of introducing the proposed NAS-wide change. The work of the panel centered on examining KATL’s operational experience conducting reduced divergence departure operations **and found no evidence to suggest that the reduction of divergence to 10 degrees has introduced risk into the NAS. In 2014, the FAA Terminal Procedures Office (AJV-822) initiated a Document Change Proposal (DCP) and drafted language to authorize a minimum of 10**

**degrees of course divergence between successive and simultaneous RNAV SID departures. Following a review and comment period, FAA Air Traffic Procedures (AJV-8) approved the document change for publication in FAAO JO 7110.65 with an effective date of 25 June 2015.**

*See, SAN PBN ABCX2 ELSO Report at 7.*

ELSO is, therefore, a permitted and recommended implementation across the entire Nationwide Air System, and leverages the benefits contemplated by the FAA's NextGen system:

“The scheduled inclusion of the reduced divergence standard in FAAO JO 7110.65 permits PBN procedure implementations with reduced divergence at eligible locations throughout the NAS. Capitalizing on improved navigational precision of PBN operations, these reduced-divergence departure paths provide benefit by improving the ability of parallel and same runway operations to do the following: address terrain, obstacle, or noise sensitivity constraints; increase departure capacity or throughput during peak demand periods; reduce departure delay associated with taxi-out time; and reduce fuel burn and emissions. The new standard provides additional options for procedure designers as they seek to provide increased efficiency, safety, and environmentally friendly alternatives. The FAA plans to use the Metroplex 2 process along with single-site implementation to deploy the capability. The FAA Metroplex process currently serves to apply the standard in redesigns of departure procedures and to beneficially deploy reduced-divergence departure operations at airports throughout the NAS.”

*See, SAN PBN ABCX2 ELSO Report at 7.*

In addition to Atlanta (KATL), ELSO has already been implemented at Detroit International Airport (DTW) and will soon be implemented in Miami International Airport (MIA) and Fort Lauderdale-Hollywood International Airport (FLL). SAN is the busiest single runway airport in the United States and is an optimal candidate airport to implement ELSO.

### **C. Congress Mandated the Study of Noise Dispersion Associated with NextGen in the FAA Reauthorization Act of 2018.**

When Congress reauthorized the FAA in 2018 it required the advancement of dispersal headings and lateral track variations like ELSO to address community noise concerns.

Section 175 of the Reauthorization Act provides:

“When proposing a new area navigation procedure, or amending an existing procedure that would direct aircraft between the surface and 6,000 feet above ground level over noise sensitive areas, the Administrator of the Federal Aviation Administration shall consider the feasibility of dispersal headings or other lateral track variations to address community noise concerns, if:

- (1) The affected airport operator, in consultation with affected community, submits a request to the Administrator for such a consideration;
- (2) The airport operator’s request would not, in the judgment of the Administrator, conflict with the safe and efficient operation of the national airspace system; and
- (3) The effect of a modified departure procedure would not significantly increase noise over noise sensitive areas, as determined by the Administrator”.

Accordingly, modeling, considering and advancing our SAN PBN ABCX2 ELSO proposal will evidence the FAA’s compliance with Congress’ directives under the FAA Reauthorization Act of 2018.

### III. General Comments About Existing Alternatives in the Consultants’ May 28, 2020 Presentation

We strongly urge the SDCRAA to model and advance the ELSO proposal contained in the *SAN PBN ABCX2 ELSO Report* as our preferred first priority. However, we further offer the following comments addressing the preliminary alternatives presented at the May 28, 2020 TAC and CAC meeting and the associated Power Point, as clarified in the June 28, 2020 CAC meeting.

#### A. Waypoint Placements:

We note the consultants observation that “we can put the waypoints anywhere you want within reason” and we, therefore, would urge the consultants to anchor their designs and modeling on this central principle: use waypoints that are furthest west offshore as possible, measured from the center of the Mission Bay Jetty, routing planes as far away from our coastlines as possible. For clarification purposes, the coordinates for the suggested A2 INT waypoint should be placed as far west of the shoreline, and as far south of the WNFLD waypoint, as possible. The following Fig. 4 was created based on coordinate data provided by



the consultants to a CAC member showing in concept the location of the waypoints as we understand them to be presently conceived:

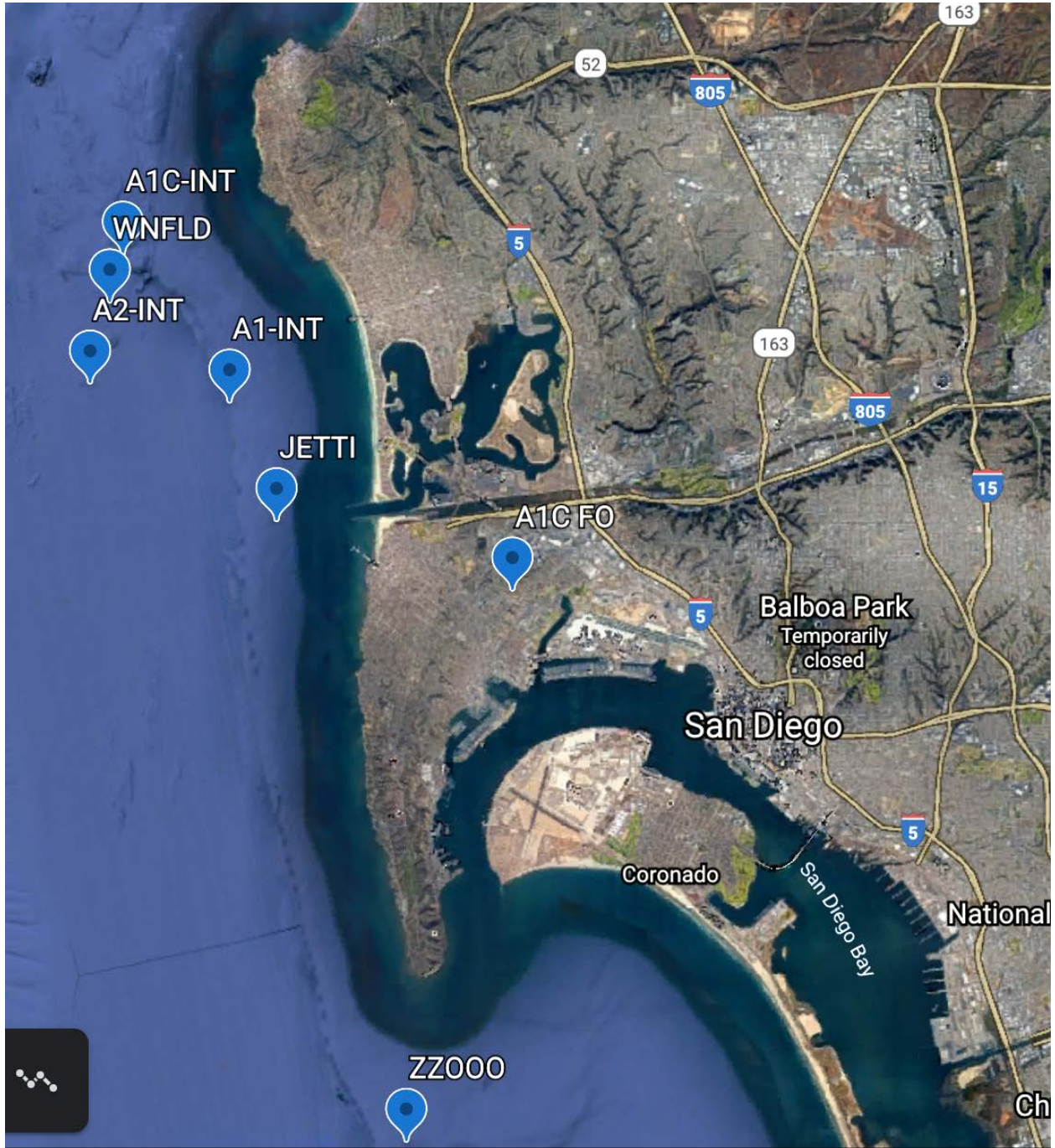


Fig. 4.

## B. Day and Night Time Noise Mitigation:

We are strongly in favor of the principle that both day and nighttime noise be mitigated along the northern coastal communities of Mission Beach, Pacific Beach and La Jolla as embodied in the Alternatives 1A, 1B and 1C, 4, ELSO 2A and 2B. We note and agree with the observation by the consultants that Alternatives presented so far can be combined, such as Alternative 1B and Alternative 4. The communities north of the airport have borne an increasingly intolerable burden of all night time traffic between the hours of 10:00 p.m. and 11:30 p.m.

## C. Performance Based Vectoring vs. Magnetic Headings:

We appreciate and understand the consultant's recommendations to use performance-based vectoring, as opposed to magnetic headings. We provide feedback here based on magnetic headings to clarify our preferences and requests.

## D. FAA Consideration of Secondary Consequences:

We note the consultants' observations that "the FAA can consider secondary consequences in a Part 150 Study, that go beyond the 65 CNEL", such as the Flight Path & Procedures Study. We support that principle and advocate that these considerations be advanced to the FAA.

# IV. Specific Comments and Questions re: Alternatives Presented at May 28, 2020 CAC Meeting

## A. Alternative 1A (Dispersed Traffic)

1. How far offshore is the A1 INT flyby waypoint and what are its coordinates? We respectfully request that it be modeled at 2.0, 2.5 and 3.0 nautical miles offshore, as measured from the center of the Mission Bay jetty channel, and that the proposed waypoint be plotted on the Alt 1A proposal. We further request that the A1 INT be positioned at least as far northwest as the contemplated A2-INT, southwest of WNFLD. We note the consultants' acknowledgment that the 1A waypoint is further south than WNFLD, which is an important design principle for La Jolla, Pacific Beach and Mission Beach.

2. Per slide 14 of the PPT, the 65 dB contour shifts appear to cover only several blocks of Ocean Beach but would include 509 fewer people and 256 fewer housing units in the 65 CNEL. We note the consultants' observation that this change in the noise contour is likely not significant for FAA purposes. We agree with that premise both as it relates to the number of people and households affected, and because any shift occurs only within a single community already within the 65 CNEL, and therefore does not shift noise from one community to another.

3. We note the consultants' intent to center departures over the Mission Bay Jetty Inlet, which is a compatible noise area with no residents or households. We agree that the intent is correct.

#### B. Alternative 1B (Concentrated Traffic Over Mission Bay Jetty):

1. How far offshore is the A1 INT flyby waypoint and what are its coordinates? We respectfully request that it be modeled at 2.0, 2.5 and 3.0 nautical miles offshore, as measured from the center line of the Mission Bay Channel and that the proposed waypoint be plotted on the Alt 1B proposal. We further request that the A1 INT be positioned at least as far northwest as the contemplated A2-INT, southwest of WNFLD.

2. We request that a new BROCK waypoint be considered located at the proposed A1-INT coordinate, with a vector to intercept located at or near the A2-INT waypoint. The intent of this concept is to create a gate between JETTI and BROCK through which planes would depart before proceeding to a vector to intercept point further offshore before turning right or left to reach the next course waypoint. A similar new intercept waypoint should be placed on the ZZOOO departure path further offshore to keep flights further from the coast of Point Loma and Sunset Cliffs.

3. We request that the schematic depicting Alt 1B be expanded to include the coast of La Jolla, permitting constituents to visualize the proposed flight path compared to the PADRZ/WNFLD path.

4. Alternative 1B is also preferred over 1A because the 65 CNEL contour is smaller, and fewer people and households are impacted. Per slide 16 of the PPT, we note that the 65 dB CNEL contour shifts marginally and results in 735 fewer people and 370 fewer housing units inside the 65 CNEL.

5. Alternative 1B is better for the overall community and is particularly better for Mission Beach, Pacific Beach and La Jolla. We note the consultants' observation that Alternative 1B "is optimal" and the "best you'll be able to get". We advocate for it as the best among the three current Alternative 1 options.

6. We note that the concentrated departure is a "vector to intercept" at 293 degrees, which is preferred because it yields more predictability as to aircraft location. Accordingly, Alternative 1B is likely preferred and superior to Alternative 1A from the perspective of the FAA, airlines and pilots.

7. We note that Alt. 1B is superior to Alt. 1C because the A2 INT is south of WNFLD, while A1C INT is placed north of WNFLD.

#### C. Alternative 1C: (Mission Bay Channel with a 300 Degree Course)

1. We are strongly opposed to Alternative 1C and urge that it not be advanced for further consideration. As designed, Alt. 1C INT is situated north of the WNFLD waypoint, and therefore, comes much closer to the coastline of Mission Beach, Pacific Beach and La Jolla.

2. Alternative 1C conflicts with one of the fundamental principles of the Flight Path & Procedures Study, which was to reduce noise in La Jolla. As observed by the consultants, "Alt 1C brings with it a big cost", which should be avoided. As further observed by the consultants, "Alt 1C may also raise concerns by the FAA about airfield capacity", which should be avoided.

3. A dispersal between 275-300 degree puts some northbound departing planes even closer to the shore than the 295-degree course or the PADRZ SID. We advocate that it be omitted from the alternatives recommended by the consultants to advance to the SDCRAA and the FAA.

#### D. Alternative 2A ELSO with Dispersion

As noted above, we urge the SDCRAA and consultants to consider and model the SAN PBN ABCX2 ELSO alternative proposed herein, which is better than either Alt. 2A or 2B. However, if that proposal is rejected, we have the following comments on the existing alternative 2A:

1. How many nautical miles offshore is the A2 INT waypoint and what are its coordinates? We respectfully request that it be modeled at 2.0, 2.5 and 3.0 NM offshore as measured from the centerline of the Mission Beach Channel jetty, and that the proposed waypoint be plotted on the ELSO 2A proposal.
2. We note the consultant's statement that the location of A2 INT is "even further south from WNFLD", which is important for La Jolla. Creating a gateway framed by JETTI and A2 INT as far offshore as possible is viewed as optimal for La Jolla and Point Loma.
3. We note the consultants' observation that Alt 2B ELSO with concentration is superior to Alt 2A with dispersion, because it is more predictable for pilots, airlines and the FAA. As predictability is a strong factor supporting safety, we would be in favor of Alt. 2B, rather than 2A.
4. Per slide 20 of the PPT, the current modeling projects 119 more people and 118 more housing units in the 65 CNEL contour, all of whom would reside at the end of Runway 27. This is a *de minimis* number of people and households in largely single resident apartments who have voluntarily chosen to live at the end of a busy airport runway. The difference in noise they will perceive whether at 65 dB or 64 dB is likely imperceptible, and these residents understood the noise implications of choosing this location when they rented or purchased these properties. The FAA and the surrounding communities of Point Loma, Mission Beach, Pacific Beach and La Jolla should not be precluded from the opportunity to mitigate noise based on the impact to a very small number of people directly off the end of a runway and directly under the long existing flight path.
5. We are open to modeling ELSO 2A with a slight adjustment by "tilting" or "angling" the path a degree or two to the north, which would likely eliminate the increase of any individuals or households in the 65 CNEL, without having a material impact on Mission Beach, Pacific Beach and La Jolla. The route design might be adjusted to center between 277 and 280 degrees, keeping the 10 degrees of separation, or expanding the cone to 11 degrees.
6. In any choice between advancing Alternatives 2A or 2B, we are in favor of 2B, and oppose 2A.

#### E. Alternative 2B (ELSO with Concentration)

As noted above, we urge the SDCRAA and consultants to consider and model the SAN PBN ELSO alternative proposed by ABCX2, which is better than either Alt. 2A or 2B. However, if that proposal is not advanced, we have the following comments about Alternative 2B:



1. How many nautical miles offshore is the A2 INT waypoint and what are its coordinates? We respectfully request that it be modeled at 2.0, 2.5 and 3.0 NM offshore, as measured from the centerline of the Mission Beach Channel jetty, and that the proposed waypoint be plotted on the next version of the ELSO 2B proposal.
2. Slide 22 of the PPT forecasts 22 more people and 77 more housing units in the 65 CNEL. As described above this is a *de minimis* number of people and households and all occurs within the same community. Therefore, we advocate that the proper interpretation is that it would not constitute shifting noise from one community to another.
3. However, we are open to shifting the 10-degree cone of departures slightly north to eliminate any such burden on people directly under the flight path off the runway. We are open to modeling the center of the cone at 286 degrees, (rather than 285 degrees) which we predict will eliminate all increases in people and households within the 65 CNEL.

#### F. Alternative 4 East Bound Night Time Noise Abatement

1. What is the “generalized path” of PADRZ RNAV SID? It appears to be greater than 295 degrees and that has been confirmed by the consultants. We request that it be modeled at 290 degrees or less.
2. We note the TAC member’s comments from Mission Beach that it is an important principle to distribute and disperse noise at night between Ocean Beach and Mission Beach, and the member’s comments that residents of South Mission Beach “are being hammered”. La Jolla agrees with that principle and with our Mission Beach neighbors on this point.

3. There is uncertainty, controversy and a potential legal challenge to what has been referred to as the Nighttime Noise Abatement Procedure. We note the SDCRAA's comment that "the SDCRAA has looked for documentation memorializing the nighttime noise abatement practice, but there is none in our possession". We believe that no such binding documentation exists between the FAA, the SDCRAA, or any other stakeholders memorializing a procedure where all nighttime traffic departs only to the north, thereby shifting noise from Point Loma to Mission Beach, Pacific Beach and La Jolla. Such a change might have legally required a California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) review, which did not take place. The impact of the practice of directing all nighttime departures towards the northern coastal communities was exacerbated by the implementation of NextGen/Metroplex and the use of the PADRZ SID. The change was and is prejudicial to La Jolla and we respectfully request that flights departing to the East during night time hours be routed on the ZZOOO SID (with an adjusted JETTI waypoint further offshore) and that north or westbound flights be routed on the adjusted PADRZ SID consistent with daytime operations. On the assumption that the consultants can recommend flight path changes that route planes further offshore to waypoints situated 2.0, 2.5 or 3.0 nautical miles offshore as measured from the centerline of the Mission Bay Jetty, the impact to all communities from nighttime noise should be mitigated.

4. We note that slide 25 of the PPT indicates that there would be 60 fewer people and 43 fewer households in the 65 CNEL by implementing Alternative 4.

### G. "Shifting Noise"

We note that there is a policy interpretation question regarding the concept of "shifting noise". We advocate that it is most correctly and properly interpreted in context of shifting noise "from one community to another" as opposed to concerns about shifting noise from one resident or household to another within the same community.

Several of the alternative proposals mildly shift noise within the community of Ocean Beach, by several streets in one direction or another. None of the noise would shift to "another community", which is the standard the SDCRAA and the FAA have articulated as a preclusion factor in the past. We believe that *de minimis* shifting of noise inside a community already within the 65 dB CNEL does not preclude implementation of noise mitigation alternatives and should not affect the FAA's consideration.

We further note that the forecasted estimates of the number of homes and people inside the 65 CNEL in 2026 are possibly, and quite likely, within a statistical margin of error in all Alternative scenarios. Comparing the alternatives based on an evaluation of the absolute numbers would, therefore, be erroneous. Comparing the Alternatives based on confidence

intervals would be more statistically accurate and will likely show that there are statistically insignificant differences between the estimates.

We note the consultants' observation and comment that "there is no magical cut off or magic line regarding shifting noise from one community to another, that "shifting noise is a policy decision for the FAA" and that "none of the alternatives would likely be viewed by the FAA as significantly impacting people within the 65 CNEL contour. We agree with those observations. We further note the consultants' observation that the FAA's policy is not to "shift noise from one population to another". Unless an individual or a household is interpreted as a "population", any *de minimis* shifting of noise inside Ocean Beach should not be regarded as a determining factor.

We also note and agree with the comment by one of the TAC members that "residents in or near the 65 CNEL will not hear a difference" if the contour is slightly changed or shifted as described in the PPT.

The *SAN PBN ABCX2 ELSO* proposal and Alternatives 1A, 1B & 1C and ELSO 2A and 2B do not shift noise from "one community to another". The additional "ins" versus "outs" as described in the May 28, 2020 PowerPoint presentation are essentially neutral and affect very few people or households, all of whom already live either in or directly adjacent to the existing 65 dB CNEL.

#### H. PADRZ RNAV SID Should Be Adjusted to Preclude Flight Tracks Above 295 Degrees

The PADRZ RNAV SID should not be used for any of the Alt 1A, 1B, 1C, 2A or 2B departure flight paths under consideration in any of the noise mitigation alternatives unless courses are adjusted to fly no further north than 295 degrees. Flying north of 295 degrees creates unnecessary noise for Mission Beach, Pacific Beach and La Jolla under the existing proposals in the May 28, 2020 Power Point. All departing flights should be routed to the proposed ALT 1B or ELSO A2 INT waypoint, situated preferably 2.5NM or 3NM offshore, or more.

We note and agree with the comments by the Mission Beach TAC member that nighttime northbound departures should all be on a heading of not more than 290 degrees, and certainly not on PADRZ at above 295 degrees.

We note that PADRZ is not set at 295 degrees, and instead is defined by reaching "520" and then proceeding to the WNFLD waypoint, which is presently too far north from La Jolla's perspective. We advocate for modeling a move of PADRZ to a position south of its current longitude and latitude, perhaps at 290 degrees.

#### I. Alternative 5: Cargo and Heavy Jets:

No cargo and international heavy jet flights should be routed on the PADRZ RNAV SID. We concur with the conclusion of the consultants to not advance this Alternative due to traffic convergence and safety issues.

#### J. Noise Barriers:

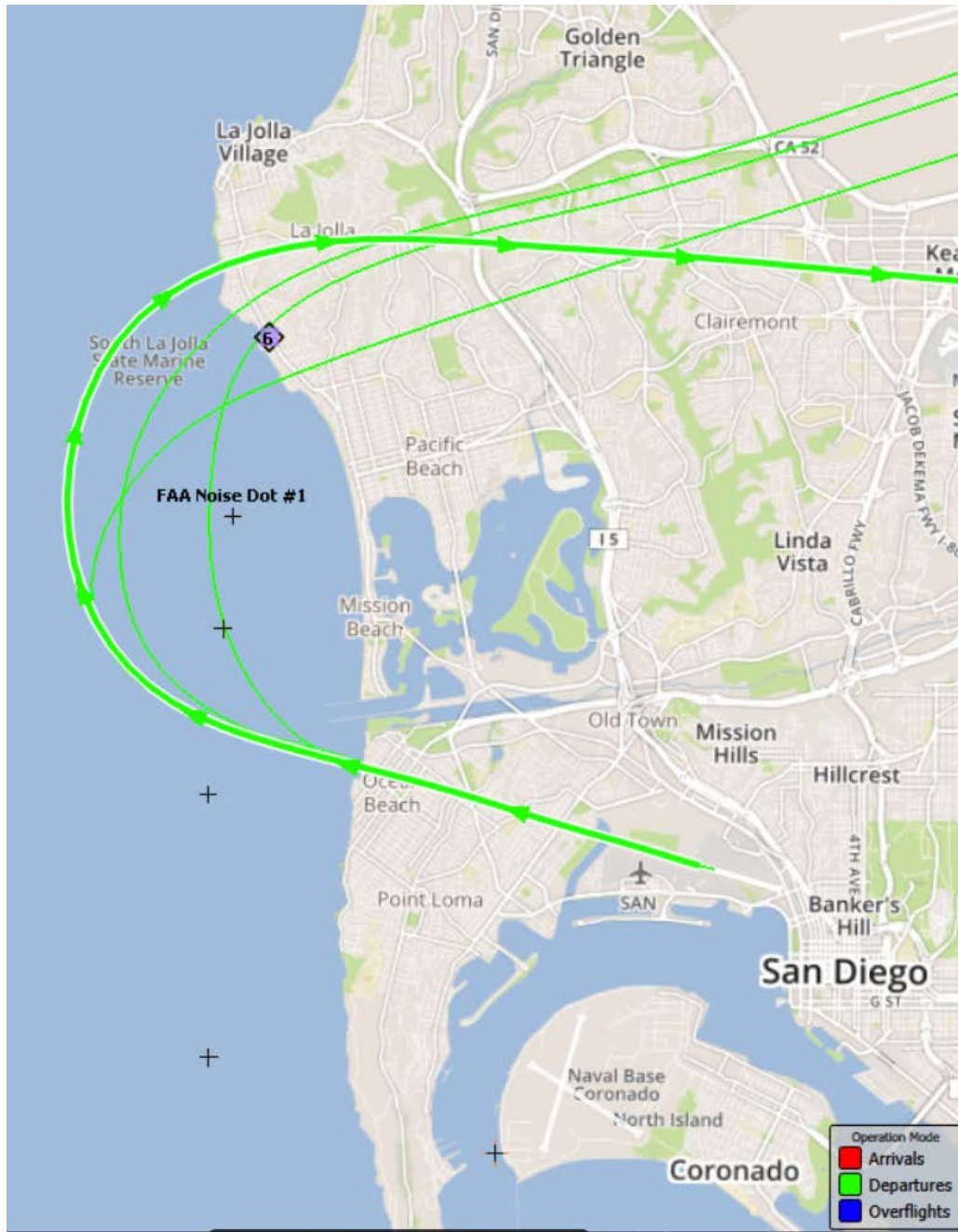
We do not believe that noise barriers will provide any substantial improvement for noise to the communities, other than perhaps the Marine Corp Recruitment Depot or other areas directly adjacent to the SAN airfield in the 65 CNEL.

#### K. Noise Abatement Departure Procedures:

We note the request of certain community members to further study Noise Abatement Departure Procedures (NADP), such as those implemented at John Wayne Airport addressing vertical climb and thrust parameters. We support modeling those potential solutions, especially if they provide relief to communities immediately adjacent to the airport like Ocean Beach and Mission Beach, as long as there are no adverse impacts to La Jolla. We note, however, the consultants' observations that thrust reduction and management potentially pose safety issues and excessive climb profiles. We are strongly opposed to any NADP that would trigger a Part 161 Study or would have any potential impact on the established Noise Curfew at San Diego.

#### L. Eliminating/Minimizing Flight Paths Directly Over La Jolla:

Beginning in at least May 2020 flights were authorized and vectored by the FAA to fly directly over La Jolla on eastbound departures, as evidenced by the following screenshot from around May 15-20, 2020. These unacceptable flight paths have continued through July 20, 2020.



The Airport Noise Office responded to the inquiry of Mr. Don Kordich (Ref# 607325-606625), indicating *“We have reviewed the operations and determined that all four flights departed in full conformance with the FAA noise dot agreement. Because there are fewer flights heading south down the coast and the airspace is open, they are using the open airspace for departures”*.

Upon inquiry the FAA responded that these flight paths were authorized due to recreational parachutist traffic. However, given the times of these overflights, including late at night, recreational parachuting cannot explain these flight paths.



These new overflights exacerbate the problem of noise for La Jolla and we request that a noise mitigation alternative be advanced that would preclude such overflights absent emergency or extenuating circumstances. In particular, we respectfully request that a new fifth noise dot be positioned north of La Jolla Village.

#### M. Proposed and Requested Schedule Going Forward:

##### 1. Reasonable Time Requested

Reasonable time is required going forward to allow for informed community engagement, modeling by the consultants and feedback from the community about the *SAN PBN ABCX2 ELSO* proposal and revised alternatives. Shortchanging the schedule at this juncture would prejudice the noise impacted communities, particularly in context of the 21 months taken by the Part 150 Study so far, most of which was consumed by input by the FAA and the SDCRAA.

##### 2. No Formal Deadline

There is to our knowledge no deadline by which the SDCRAA is required to complete the Part 150 Study. At the outset of the Part 150 Study the SDCRAA informed the TAC and CAC members that the Part 150 Study could potentially take years to complete, mainly due to the time allowed and often required by the FAA to review, approve or reject Noise Exposure Maps and Noise Compatibility Plans. Accordingly, there is no external deadline imposed by the FAA or other agency law to our knowledge requiring that the time allotted to community members for CAC and TAC comments, be abbreviated, truncated or shortened to their prejudice.

##### 3. Consideration of the Noise Exposure Maps

Other community members have requested revised modeling of the Noise Exposure Maps, which we support, particularly in light of the reduction in air travel globally and at SAN caused by the COVID-19 pandemic. Additional time could permit revised forecasts.

Preparing and submitting revised forecasts will likely substantially reduce the 65 dB CNEL, which will have a significant impact on the viability of the Alternatives presented in the consultant's presentation. Questions to be answered include whether is it still reasonable to project an increase of 7,305 housing units in Ocean Beach by 2026, which is a 94% increase? Likewise, is it reasonable to forecast 14,937 more people living in Ocean Beach by 2026, an increase of 77%? If those assumptions are incorrect, they misstate the potential impact of all noise mitigation alternatives in Ocean Beach and incorrectly lead to the projection of increases in the size and location of the 65 dB CNEL and the population and housing units within it. We also note that a smaller 65 CNEL contour would substantially reduce the anticipated cost and timeline of the Quiet Homes Program, by many millions of dollars and years.

## 4. Proposed Schedule

The majority of members of the CAC proposed a schedule going forward by letter dated June 15, 2020. We request that the time frames and events identified in that schedule be adopted. In summary the proposed schedule is:

**July 28, 2020:** Last day for the CAC/TAC members and the communities to submit written comments regarding the consultants' preliminary presentations of May 28, 2020 as augmented by the June 25, 2020 presentation.

**July 29, 2020—September 15, 2020:** Time allowed for the CAC/TAC members to engage with experts and their communities to gather additional input and feedback, while also allowing sufficient time for the SDCRAA consultants to conduct additional analysis and modeling, with results published preferentially by August 28, 2020.

**September 16, 2020:** Set the next TAC/CAC meeting for the SDCRAA's consultants to present their results and refined modeling results to the *SAN PBN ABCX2 ELSO* proposal and the comments received about the Alternatives presented on May 28, 2020, and to address noise barrier options and land use/administrative alternatives.

**October 30, 2020:** Deadline for the receipt of additional TAC/CAC and public comments following the September 16, 2020 meeting;

**November 1, 2020—December 18, 2020:** Time period during which the SDCRAA consultants shall endeavor to finalize their recommendations.

**January 13, 2021:** CAC/TAC meeting to present the consultants' final recommendations.

**February 26, 2021:** Last day to receive public comments on the consultant's final recommendations;

**March 2021:** SDCRAA to submit preliminary Noise Exposure Maps (NEMs), Noise Compatibility Plan (NCP) including the SDCRAA's draft noise mitigation recommendations to the FAA, including the public comments on the consultant's final recommendations;

**April 2021:** SDCRAA to present the consultants' final recommendations to ANAC;

**June 2021:** SDCRAA to submit final NEMs and NCP to the FAA for review, acceptance and approval.

## V. Conclusion

We respectfully urge the SDCRAA and its consultants to give serious high priority consideration to the SAN PBN ABCX2 ELSO proposal herein. It is a win/win/win/win for the FAA, the airlines, the SDCRAA and the impacted communities, minimizing noise impacts while facilitating the FAA's interests in optimizing capacity and safety and allowing for maximal airline efficiency. We believe the time invested in modeling the proposal, which is a minor adjustment from the current ELSO 2A and 2B proposals, will lead to a consensus among all or substantially all stakeholders and serve as a basis to expeditiously move forward to resolve noise concerns and litigation.

In the event that the ABCX2 proposal is not advanced, we respectfully request that the SDCRAA prioritize Alternative 1B or ELSO 2B for further modeling as described herein with an A2- INT waypoint placed at 3NM offshore.

Respectfully submitted,

\_\_\_\_\_/AMS/\_\_\_\_\_  
Anthony M. Stiegler, Esq.  
CAC Member

\_\_\_\_\_/CM/\_\_\_\_\_  
Chris McCann, Ret. U.S. Air Force  
TAC Member