DRAFT

ROUNDTABLE ANNUAL WORK PLAN

July 1, 2015 through June 30, 2016

Presented to and adopted by the Roundtable on October 7, 2015

Organization of the Work Program

The Work Program is organized as follows. Each of the items includes: item description, background, present to Roundtable, staff assigned, Strategic Plan goal and budget allocated.

- Administrative Items
- Legislative Items
- Research Items
- Aircraft Operations/ Airspace

Introduction

The Work Program is part of the Roundtable's overall approach to planning efforts; it is guided by the Roundtable's Strategic Plan. The Strategic Plan has a three-year planning horizon and the Work Program has a one-year planning horizon. The Work Program items are distilled from the overall Strategic Plan goals; each of the Work Program items are associated with a Strategic Plan goal.

While the Work Program is a one-year document, many items will be rolled over through multiple planning cycles. This is due to the longer-term nature of some items, including standing updates and future technologies. These longer-term items remain on the Work Program in order for the Roundtable to maintain their understanding of the issue. The Roundtable appointed a Work Program Subcommittee to carry out the work program planning process and to bring a recommended Work Program back to the full Roundtable for its consideration and adoption.

Work Program – Administrative Items

Al1. Roundtable Website Maintenance

Item Description:

Maintain the Roundtable website www.sforoundtable.org and update with new information as required for the public.

- Maintain existing website.
- Include historical information as required.
- Upload agendas, agenda packets, and subcommittee meeting information.
- Maintain and continue to populate informational section containing Noise 101 presentations and noise metric videos.

Background:

The Roundtable updated its website as a Work Program item in 2013 – 2014 and was presented to the Roundtable at its September 2013 meeting.

This is a maintenance item. Roundtable staff and consultant staff will update the website on permeeting with the agenda and agenda packet, upload subcommittee agendas, and update the website with appropriate documents, links, and tweets.

Present to Roundtable: As new information is uploaded.

Staff Assigned: Roundtable staff

Strategic Goal: 4

Budget Allocated: No extra budget effort for RT staff is anticipated; updates will utilize existing staff resources where possible.

Al2. Fly Quiet Update

Item Description:

Continue receiving updates to the airport's Fly Quiet Program

Background:

The Roundtable and SFO launched the Fly Quiet Program in 2001. The Fly Quiet Program is a quarterly report of airline performance in specific categories. The Roundtable holds the Fly Quiet awards at the February meeting each year, inviting the overall winner and category winners to the Roundtable meeting for an official presentation of the awards. The awards presented are: Chairman's Award, Fly Quiet Award, and Most Improved. It is recommended the February meeting be held at the SFO airport museum to present the awards to airlines receiving them to celebrate their accomplishments.

Present to Roundtable: This item is anticipated to be presented to the Roundtable at meetings immediately following the closing of each reporting quarter, including information on fleet mix trends at SFO.

Staff Assigned: Airport staff

Strategic Goal: 2

Budget Allocated: Budget expenditure to include refreshments and the existing budget for awards.

Al3. Airport Updates

Item Description:

Continue receiving updates from the airport Director or other staff on significant airport happenings, traffic levels, operations, and other data from the preceding months

Background:

The airport provides information germane to the RT and noise issues at each meeting. The briefing is typically provided by the airport Director.

Present to Roundtable: This item is anticipated to be presented to the Roundtable at each meeting.

Staff Assigned: Airport staff

Strategic Goal: 4

Budget Allocated: No extra budget effort anticipated.

Al4. Outreach to OAK Noise Forum and Potential Santa Clara County Noise Forum

Item Description:

Continue dialogue with the noise forums within the Bay Area at Oakland International Airport and Mineta San Jose International Airport to share information and best practices, discuss issues relating to Bay Area and national airport noise issues. Assist Santa Clara County with advice on implementing a noise forum and share information with cities regarding aircraft operations.

Background:

The SFO RT has a history of maintaining interaction with fellow airport-sponsored noise organizations in the Bay Area. This has led to joint letters to the FAA and other organizations regarding noise mitigation issues, joint trip to NORCAL TRACON, and understanding how all three airports interact with regards to airspace and noise mitigation. Santa Clara County does not currently have a sanctioned group focused on aircraft noise issues, however there are studies being commissioned by municipalities in Santa Clara County regarding SFO-related aircraft operations. Mineta San Jose International Airport used to have a noise forum that met on a quarterly basis; the noise forum stopped meeting and all noise-related issues are heard at the SJC Airport Commission Meeting. The SFO RT, at its September 28, 2015 Subcommittee meeting, proposed to continue outreach to Santa Clara County with regards to SFO overflights and sharing of information from overflight noise from aircraft transitioning the airspace from other regional airports.

Present to Roundtable: This item is anticipated to be presented to the Roundtable after any interactions or 'teaming' with OAK, SJC, or related organizations on a regional level.

Staff Assigned: RT staff

Strategic Goal: 3

Budget Allocated: No extra budget effort anticipated.

Al5. Include LAX and ORD Roundtable Groups on SFO RT Distribution List

Item Description:

Maintain contact with Roundtable organizations throughout the country via correspondence relating to Roundtable issues on a state and national level.

Background:

The SFO RT has a history of maintaining interaction with the fellow airport-sponsored noise organizations in the country through sharing correspondence relating to current noise issues including pending legislation, funding allocation, or new technology.

Present to Roundtable: This item is anticipated to be in the correspondence section of the RT packets as required.

Staff Assigned: RT staff

Strategic Goal: 3

Budget Allocated: No extra budget effort anticipated.

Al6. Send RT Member(s) to Noise Forums or Technical Conference

Item Description:

Maintain knowledge base of the RT and its members by sending members to technical conferences or other noise forums.

Background:

The SFO RT has a history of maintaining a strong knowledge base of aircraft noise theory that is communicated to the membership. This has been done through conducting Noise 101 sessions, sending RT members to NORCAL TRACON, and to industry conferences.

Present to Roundtable: Fall 2015 meeting; Post-conference attendance updates

Staff Assigned: RT staff

Strategic Goal: 4

Budget Allocated: Anticipated budget of \$2,000/member to attend the AAAE/ACI conference in San Diego in fall 2016. Local meeting attendance not anticipated to have a budgetary impact.

AI7. Send RT Coordinator to LAX Roundtable Meeting

Item Description:

Continue to correspond and maintain understanding of the LAX Roundtable structure and issues by making a yearly site visit.

Background:

The SFO RT keeps in contact with other airport noise organizations, including the LAX Roundtable. In the past, the SFO RT has sent the RT Coordinator to an LAX Roundtable meeting to observe their practices and exchange information with their staff. The RT Coordinator and Technical Advisor will attend an LAX Roundtable meeting on an odd-numbered month in 2015.

Staff Assigned: RT staff and Technical advisor

Strategic Goal: 4

Budget Allocated: Anticipated budget of \$1,000 for the RT Coordinator.

Al8. National Organization to Insure a Sound Controlled Environment N.O.I.S.E. Membership

Item Description:

Maintain understanding of regional and national aircraft noise issues and join with a national group to support legislation and research to quieter aircraft, procedures, and technology.

Background:

The National Organization to Insure a Sound Controlled Environment (N.O.I.S.E.) is an advocacy group focused on reducing noise for communities surrounding airports. The Washington, D.C.-based organization works with major organizations including the National League of Cities to arrange meetings with federal agencies and Congressional offices. The County of San Mateo has historically been involved with N.O.I.S.E. The Roundtable can look for opportunities within N.O.I.S.E. and the League of Cities to make presentations regarding aircraft noise issues. At this time, N.O.I.S.E. is active, but its efficacy isn't fully understood. At the September 28, 2015 Subcommittee meeting, the members recommended staff investigate the pros and cons of membership; approval of this item would be brought to the Roundtable at a subsequent regular meeting.

Present to Roundtable: As required and as legislative information is available.

Staff Assigned: RT staff

Strategic Goal: 3

Budget Allocated: Anticipated budget of \$5,000 to join N.O.I.S.E. and \$2,000/member and/or RT staff to attend its Legislative Summit in a yet-to-be-determined location.

Work Program – Legislative Items

LI1. Research Federal, State, and International Noise Legislation

Item Description:

The Roundtable will continue its research of federal, state, and international proposed noise legislation, as well as existing legislation as it applies to operations at San Francisco International Airport.

Background:

The Roundtable keeps track of legislative issues on state, federal, and international level to determine the implications of legislation on operations and noise issues at San Francisco International Airport. This is done through a subscription to the Airport Noise Report (ANR) as well as monitoring legislation through the Federal Register and other list services. In addition to the RT monitoring noise issues on a federal level, the organization will monitor noise regulations suggested by CAEP/ICAO as voluntary or mandatory. The International Civil Aviation Organization (ICAO) is an organization that recommends best practices and adopts standards for the aviation industry, including noise as it relates to aircraft operations. This research could result in correspondence from the RT to the legislative sponsor regarding any positive or negative impact of the legislation.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 3

Budget Allocated: No extra budget effort for RT staff. The yearly subscription to ANR is \$850.

Work Program - Research Items

RI1. Guest Speaker

Item Description:

The Roundtable will continue its efforts to have guest speakers invited to RT meetings to present information regarding a topic of interest to the RT.

Background:

The Roundtable, in an effort to keep current on trends in noise and airports, set up a guest speaker item as part of the 2011-2012 Work Program. It is the goal of the RT to continue inviting speakers to the RT, increasing the membership and public's understanding of current issues. The RT and airport staff will recommend speakers, and the RT membership is encouraged to request experts in a specific topic to speak.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 3

Budget Allocated: No extra budget effort for RT staff, travel costs would be at the expense of

the speaker.

RI2. Noise Effects of Aircraft – Traditional Arrival versus Optimized Procedure Descent (OPD)

Item Description:

Determine the difference, measured using a single event metric, of traditional aircraft arrivals versus aircraft utilizing published Optimized Procedure Descent (OPD) criteria.

Background:

As part of NextGen, aircraft will at times execute an OPD approach, which allows an aircraft to descend to an airport using idle power from cruise altitude instead of the standard step-down approach. This type of approach can bring aircraft in lower altitudes above residential areas on the Peninsula. Studies have been conducted in the Woodside area by the Airport Noise Abatement Office, as well as with the Boeing Corporation.

The Roundtable consultant presented a report of aircraft arrivals over the Woodside area comparing traditional to OPD approaches to the Subcommittee in June 2013 and to the full Roundtable in September 2013. This item should be continued as more aircraft become equipped to fly an OPD approach.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff, in conjunction with Airport staff

Strategic Goal: 1

Budget Allocated: Budget to be determined if additional studies need to be conducted beyond

capabilities of Airport staff.

RI3. Airport Cooperative Research Program (ACRP) Participation

Item Description:

The Roundtable has the option to become involved with ACRP in three ways: submit a problem statement to the Airport Cooperative Research Program (ACRP) for an item to study in depth, submit applications to serve on an ACRP panel, or support research statements to carry forward.

Background:

ACRP is a subset of the Transportation Research Board (TRB) that studies issues relating to airport operations, including noise abatement. Each year ACRP solicits problem statements relating to a global issue that affect airports throughout the country. ACRP chooses the problem statements to then turn into research projects. Each research project is comprised of a panel of experts and a consultant that completes the research document under the guidance of the expert panel.

In addition to ACRP soliciting for proposals, expert panel members are also required each year. If there are research projects that are applicable to community noise groups or noise mitigation, members of the RT are encouraged to apply to these expert panels. The expert panels meet 2-3 times per project in Washington, D.C.

Present to Roundtable: ACRP Problem Statements are solicited in the spring and applications to serve on an ACRP panel open up in the fall.

Staff Assigned: Roundtable staff

Strategic Goal: 3

Budget Allocated: No extra budget effort; all travel is paid by ACRP.

RI4. CNEL Noise Insulation Boundary Update

Item Description:

The Roundtable will receive updates on the status of the residential sound insulation program at SFO on a biannual basis to include items such as: number of homes within the currently-

approved Noise Exposure Map that are not insulated, number of homes that declined participation in the program, and estimated number of homes being insulated.

Background:

The Roundtable has received updates from the airport over the course of the sound insulation program. The program's focus is to find and inform eligible homeowners that their residence can receive sound insulation treatments for being within the 65 CNEL noise contour, or Noise Exposure Map. The airport is in the process of updating its NEM.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable and airport staff

Strategic Goal: 4

Budget Allocated: No extra budget effort for RT staff.

RI5. Use of Single Event Noise Metrics to Evaluate Noise Outside of the 65 CNEL

Item Description:

The Roundtable will research the feasibility of using supplemental noise metrics outside of the 65 CNEL to determine the impact of aircraft operations.

Background:

The 65 CNEL is the federally and state accepted metric to determine impacts from aircraft noise as well as eligibility for sound insulation programs. As aircraft become quieter, the 65 CNEL noise contour has become smaller in size, reducing the "affected areas" as defined by federal and state standards. As a response to this, airports have studied utilizing supplemental metrics, which show noise levels at various locations in the community utilizing metrics including Lmax and SENEL.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 3

Budget Allocated: No extra budget effort for RT staff.

RI6. Use of Unmanned Aerial System in the National Airspace System

Item Description:

The Roundtable will monitor legislation and research related to Unmanned Aerial Systems (UAS) within the National Airspace System (NAS) that is controlled by the Federal Aviation Administration.

Background:

UAS are any unmanned aerial vehicle, drone, or system that is flown remotely by a pilot or via an onboard computer system. Rules and regulations for UAS operations are in its infancy; there are no noise regulations on their use. This program item will monitor uses of UAS and FAA regulations regarding their use and noise abatement regulations.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 4

Budget Allocated: No extra budget effort for RT staff.

Work Program - Aircraft Operations/ Airspace

AO1. NorCal Optimization of Airspace and Procedures in the Metroplex (Metroplex)

Item Description:

The Roundtable will monitor implementation of flight procedures in the NorCal Metroplex project specific to procedures and operations at San Francisco International Airport. This program, formerly referred to as "OAPM", is now "Metroplex."

Background:

The NorCal Metroplex is the update of the airspace in the bay area. Federal regulations required the FAA complete an Environmental Assessment (EA) for the project, determining any environmental impacts to the project study area. The EA was released in March 2014; the Record of Decision on the EA was published July 2014; all Metroplex procedures related to SFO operations are operational.

The Roundtable staff and its consultant will monitor implementation of the 14 new or enhanced procedures for SFO, with specific attention on the following:

- NIITE procedure enhancing the QUIET Standard Instrument Departure (SID)
- SERFR enhancing the BIG SUR & HADLY arrivals
- SSTIK procedure enhancing the PORTE and OFFSHORE SID

Present to Roundtable: This item will be reviewed by the RT as required and updates to the

RT will be from RT staff or the FAA.

Staff Assigned: Roundtable staff

Strategic Goal: 1

Budget Allocated: No extra budget effort for RT staff.

AO2. Woodside Optimized Profile Descents (OPD)

Item Description:

The Roundtable will receive briefings on the Woodside OPD

Background:

The Airport currently publishes the weekly Woodside VOR report on its website. This report shows the number of aircraft that flew over the Woodside VOR between the hours of 10:30 p.m. – 6:30 a.m. This Work Program item would require the Airport to provide a report on aircraft that utilized the OPD approach between these hours.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 1

Budget Allocated: No extra budget effort for RT staff.

AO3. SSTIK and PORTE 5 Departures

Item Description:

The Roundtable will continue to monitor operations on the SSTIK and PORTE 5 departures.

Background:

As part of the Metroplex, the SSTIK departure procedure replaced the PORTE departure for all aircraft equipped to fly RNAV procedures. Both departures fly over portions of the City of Brisbane. In 2012-2013, the Roundtable resumed its work with NORCAL TRACON, SFO Tower, airlines, and SFO staff to determine why the number of aircraft flying over southern portions of Brisbane increased. This Work Program item will continue to monitor this issue and initiate outreach to stakeholders that can assist with mitigation.

Present to Roundtable: This item will be reviewed by the RT as required.

Staff Assigned: Roundtable staff

Strategic Goal: 1

Budget Allocated: No extra budget effort for RT staff.

AO4. Visit NORCAL TRACON

Item Description:

The Roundtable membership will visit the NORCAL TRACON facility in Mather, California.

Background:

NORCAL TRACON is a radar approach facility that controls aircraft movements in the bay area and other portions of Northern California and Nevada. NORCAL TRACON is a key stakeholder for the RT and has historically worked with the RT to implement noise abatement procedures when traffic allows. This site visit will provide members of the RT with an understanding of how NORCAL TRACON operates and watch aircraft movements in real time. The OAK Noise Office has coordinate this effort; the Roundtable proposes to coordinate this effort for the spring 2016 trip.

Present to Roundtable: Schedule trip in spring 2016; present a trip report to the Roundtable following the trip.

Staff Assigned: Roundtable staff

Strategic Goal: 4

Budget Allocated: The Roundtable's contribution on previous joint trips with the Oakland Noise Forum has been approximately \$550, which included transportation and meals for up to 10-12 Roundtable members. For the spring 2016 trip, the Roundtable's contribution would be approximately \$1,000 for transportation and meals as the primary coordinator of the trip.

AO5. Aircraft Use of Satellite Procedures

Item Description:

Monitor additional uses of satellite-based procedures to enhance operations as they are applicable to SFO.

Background:

As referenced in Work Program Item AO1, the airspace related to operations at SFO was part of the Metroplex airspace project. This project identified numerous Area Navigation (RNAV) procedures to enhance existing arrival and departure procedures. This Work Program item will

further define procedures to help noise abatement efforts at SFO, including Required Navigation Performance (RNP). This item would be collaborative with the SFO Noise Abatement Office and at least one airline to assist with procedure enhancements. This item has moved from information to research/action.

Present to Roundtable: As required.

Staff Assigned: Roundtable staff

Strategic Goal: 1

Budget Allocated: No extra budget effort for RT staff.

AO6. Airbus A320 Aircraft Vortex Generator

Item Description:

Work with the SFO Noise Abatement Office to equip carriers that use the Airbus A320/319 family of aircraft with vortex generators for the underwing fuel vent.

Background:

Research has shown that Airbus A320 aircraft have a fuel vent on the underside of each wing. At certain altitudes and speeds, air coming in contact with these vents results in a wind vortex that emits a high-pitched whine noise. This is typically heard 20 – 30 miles away from an airport on arrival. The SFO noise abatement office has researched the solution, which is approximately \$3,000.00, includes labor and parts to install. The Roundtable will work with the noise office to advance this effort.

Present to Roundtable: As required.

Staff Assigned: Roundtable staff

Strategic Goal: 2

Budget Allocated: No extra budget effort for RT staff.