



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Public Works



Date: June 16, 2016
Board Meeting Date: June 28, 2016
Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: James C. Porter, Director of Public Works

Subject: Status update on the San Carlos Airport Aircraft Disturbance Study

RECOMMENDATION:

Review and provide input on the status of the San Carlos Airport Aircraft Disturbance Study and next steps.

BACKGROUND:

The San Carlos Airport is owned and operated by the County of San Mateo and is home to approximately 500 aircraft and over 25 aviation-related businesses generating over 130,000 flights per year. Over the past several years, the County has received a significant number of complaints and comments from residents about aircraft disturbance issues at the San Carlos Airport. In response to community concerns, your Board requested staff to meet with the community and Airport businesses to assess the problem and recommend possible actions to address the negative impacts of aircraft disturbances.

On March 8, 2016, your Board initiated a San Carlos Airport Aircraft Disturbance Study (Aircraft Disturbance Study) to look at options to provide meaningful relief for affected communities. Over 60 community members spoke both in favor and against the options listed in the Comprehensive Plan to Address Aircraft Disturbances (Attachment A) presented to your Board at the March meeting. It is clear, based on community input, that noise reduction efforts to date have not resolved the considerable community concern over aircraft disturbances.

At the April 26, 2016 Board meeting, staff presented a plan that included hiring two airport consultants to: review policies, procedures, and minimum standards; identify best practices in analogous general aviation airports; and review and analyze flight data over the past five years. The consultants were also asked to analyze the impacts of proposed operational changes, including reducing hours of operation, reducing the

number of flights per day, and imposing landing fees. The plan also included community outreach and a survey of residents and Airport users.

DISCUSSION:

At the April 26, 2016 Board meeting, Surf Air, a scheduled charter operator, announced they have been working with the Federal Aviation Administration (FAA) on a proposal for a new arrival flight path that would be flown instead of the Global Positioning System (GPS) arrival when weather conditions allow. The GPS arrival flight path is a straight-line approach that crosses over the communities of Atherton, Menlo Park, North Fair Oaks, and Redwood City. The new proposed route, the "Visual Bayside Approach", crosses over Moffett Field and flies over the San Francisco Bay until reaching the "Cement Plant" at the end of Seaport Blvd. in Redwood City. County Geographic Information Systems (GIS) data estimates the current GPS approach flies over approximately 11,400 homes impacting over 37,500 residents, while the new Visual Bayside Approach does not fly over any homes in San Mateo County. The current GPS arrival route and the proposed Visual Bayside Approach route are included as Attachment B.

After review of Surf Air's proposal and public comment, your Board directed staff to work with Surf Air management, the FAA, and Representatives Jackie Speier and Anna Eshoo to implement this new arrival flight path.

During the month of May 2016, 31 test flights were flown successfully with no negative impacts on the SFO airspace or FAA operations. The FAA stated they will approve six-months of full-time operational testing of the Visual Bayside Approach to analyze impacts on FAA operations and the community. Staff expects FAA approval within the next two weeks for Surf Air to begin the six-month testing period. If the testing is found to provide relief for residents, and it continues to work operationally for the FAA, the County will request the FAA's approval of the Visual Bayside Approach on a permanent basis.

This new arrival flight path can only be flown in good weather conditions. Based on an analysis of weather conditions in 2015 averaged over a 24-hour period, staff determined that this new Visual Bayside Approach could be flown 85 percent of the year.

Your Board also directed staff to meet with the Airport Noise Working Group (Working Group) to receive input on the new flight path and the plan to address community noise concerns. The Working Group met on May 31, 2016, and included Supervisors Slocum and Horsley, staff from Representatives Jackie Speier and Anna Eshoo's office, Surf Air, the Pilots Association, staff, and residents from North Fair Oaks, Redwood City, and Atherton. The Working Group approved of the new arrival flight path and supported the plan to study current conditions and analyze operational changes and best practices. The Working Group encouraged staff to continue to review and implement airport best practices and agreed that the community survey and the Town Hall meetings should be held after the FAA approves the full-time testing period.

Next Steps

The Airport should receive approval for implementation of the new arrival flight path in approximately three to four weeks. Once that occurs and the new approach has been implemented by Surf Air, staff will begin Town Hall meetings and send the survey to residents and Airport users to determine if the negative impacts of aircraft disturbances have been decreased with this new flight path. Additionally, a mail survey in both English and Spanish will be conducted in August to assess the impact to aircraft disturbances from the change in arrival flight path. The Airport should also receive the consultants' reports by the first week of August with their recommendations for policy, fee updates, and implementation of best practices. Staff plans to return to your Board in October 2016 with survey results and recommendations for updates to Airport policies, procedures, minimum standards, and possibly fees. Consideration of operational changes will continue to evolve as staff evaluates the implementation of the new arrival flight path and whether it provides noticeable relief for the community.

County Counsel has reviewed and approved this item as to form.

The proposed plan to reduce aircraft disturbances contributes to the Shared Vision 2025 outcome of a Livable Community by allowing residents, business owners, and Airport customers to help shape airport noise reduction measures in a way that best meets the needs of the community.

FISCAL IMPACT:

Staff estimates the cost of hiring a consultant to analyze data, refine noise reduction options, and conduct a survey of impacted residents is approximately \$165,000. The Airport Enterprise Fund currently does not have sufficient funds to fully support this project, due to revenue requirements for upcoming capital projects. Funding is therefore shared between the General Fund (\$90,000) and the Airport Enterprise Fund (\$75,000).

Attachment A: Possible Components of Comprehensive Plan to Address Aircraft Disturbances at San Carlos Airport

Attachment B: Current GPS Arrival and Proposed Visual Bayside Approach

**Possible Components of Comprehensive Plan
To Address Aircraft Disturbances
at San Carlos Airport**

Presented on March 8, 2016

		A	B	C	D	E
OPTION	POSSIBLE MEASURE	DESIRED IMPACT	ESTIMATED TIME FRAME	COST	NOTES	MAY IMPACT*
<i>GROUP I – RULES, REGULATION AND POLICY</i>						
1.	<i>Adopt</i> revised County policy on role of airport, safety, and community impact objectives	Establish clear County policy on airport matters	4 months	Low	Require researching best practices, community outreach, and BOS approval.	None
2.	<i>Conduct inventory</i> of existing Airport rules/regulations, minimum standards	Background research on current status of safety and noise protections	2 months	Low	Would need to be included as part of the process.	None
3.	<i>Research best practices</i> for analogous airports that need to address safety and community impacts	Background research on current status of safety and noise protections	3 months	Low	Would need to be included as part of the process.	None
4.	Strictly <i>enforce</i> County code, rules and regulations that accord with best practices and County policies	Improve compliance with safety and noise objectives	4 months	Low	May require adoption of revised County policies. Currently, enforcement related to safety, not noise.	T, N

* F = Frequency of overflights; T = Time of day; N = Perceived noise level; and A = Altitude of flight

		A	B	C	D	E
OPTION	POSSIBLE MEASURE	DESIRED IMPACT	ESTIMATED TIME FRAME	COST	NOTES	MAY IMPACT*
5.	Revise County code, rules/regulations as necessary to accord with results of best practices research	Improve compliance with safety and noise objectives	4 months	Low	Require researching best practices, community outreach, and BOS approval.	F, T, N, A
6.	Revise Airport minimum standards as necessary to accord with best practices	Ensure that airport commercial enterprises are operating in accord with industry standards	4 months	Low	Require researching best practices, community outreach, and BOS approval.	None
7.	Revise rates and charges as appropriate to accord with best practices	Ensure that rates and charges reflect cost of airport operations	4 months	Low	Benchmark fees, set new rates, BOS adoption.	F, N
8.	Reevaluate landing fees	Ensure that current fees appropriately reflect cost of actual operations	4 months	High	Benchmark fees, community outreach, BOS adoption. Staff intensive, or will need automated camera/billing system.	F, N

GROUP II – MANDATORY OPERATIONAL RULES

9.	Time of day restrictions	Tailor restrictions to specific problem times	3 months	Low	Non-stage rated aircraft only.	F, T, N
10.	Nighttime curfew	Reduce or eliminate nighttime noise	3 months	Low	Non-stage rated aircraft only.	F, T, N
11.	Implement a reservation/slot system for aircraft arrivals	Limit total number of commercial aircraft arrivals per day.	6 mo – 1 yr	High	Staff time intensive, unless an automated online system is available.	F, T, N

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		A	B	C	D	E
OPTION	POSSIBLE MEASURE	DESIRED IMPACT	ESTIMATED TIME FRAME	COST	NOTES	MAY IMPACT*
12.	Restrictions on stage 2 aircraft (including helicopters) through Part 161 procedures.	Reduce overall helicopter noise	1-year +	High	Requires Part 161 study.	F, N
<i>GROUP III – VOLUNTARY MEASURES</i>						
13.	Research other similar airports' best practices for voluntary measures, fees and charges, operational rules	Background research on current status of safety and noise protections	6 mo	Low		None
14.	Increase hours of voluntary curfew	Reduce the number of flights in early morning and nighttime hours.	3 months	Low	Non-stage rated aircraft only.	F, T, N
15.	Request higher altitude approaches	Reduces the noise level over noise sensitive neighborhoods	3 months	Low	Request aircraft increase altitude on approach an additional 1,000 feet when safe.	N, A
16.	Develop and publicize a program to discourage night flying	Public and pilot education. Reduce the number of night flights.	3 - 6 months	Low		F, T, N
17.	Implement a monetary reward program for compliant operators	Encourages compliance with noise abatement procedures.	3 – 6 mo	Low/ Medium	Can be achieved through reduction in fees for compliance. May impact revenues.	F, T, N, A

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OPTION	POSSIBLE MEASURE	DESIRED IMPACT	ESTIMATED TIME FRAME	COST	NOTES	MAY IMPACT*
18.	Establish advisory/ oversight committee	Establish permanent mechanism for community input and oversight of airport-related decisions	3 months	Low	“Surf Air Noise Working Group” has been in existence since Oct. 2013. New group would require approx. 3 months to establish.	None

GROUP V – NOISE MITIGATION

19.	Change runway geometry to accomplish County objectives	Ensure that arrivals and departures are over non-residential areas, if possible	1 year	Varies	Requires FAA approval and may have unintended consequences.	F, N
20.	Sound insulation	Reduce noise in individual households impacted.	1-2 years	High	Doesn't meet FAA noise threshold. FAA won't reimburse. Cost per home is approximately \$150k. Household still impacted when open window or outside.	N
21.	Prepare FAA Part 150 Noise Compatibility Program	Increase community awareness	2 – 4 years (to complete study, depending on level of community involvement)	High	Grant application submitted to the FAA. Study expected to begin Sept. 2016. FAA unlikely to fund program since noise is less than FAA threshold.	N

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OPTION	POSSIBLE MEASURE	DESIRED IMPACT	ESTIMATED TIME FRAME	COST	NOTES	MAY IMPACT*
GROUP VI – FLIGHT TRACKS AND PROCEDURES						
22.	Preferential runway use procedures	Reduce overflights of noise-sensitive areas	1+ years	Low	Currently only have GPS arrivals to 30 runway. GPS arrivals to Runway 12 would require FAA approval.	N
23.	New routes / Charted Visual Flight Procedure (CVFP)	Reduce overflights of noise-sensitive areas in good weather conditions.	1+ years	Low/ Medium	Needs approval by FAA.	F, N

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Current GPS Arrival



Proposed Visual Bayside Approach