



# City Council Report

City Council Meeting: September 24, 2013

Agenda Item: 3A

To: Mayor and City Council  
From: Martin Pastucha, Director of Public Works  
Subject: Pilot Aircraft Retrofitting Program

## Recommended Action

Staff recommends that the City Council:

1. Direct staff to proceed with implementation of a pilot program for retrofitting aircraft used in flight training with mufflers or other sound mitigation equipment. The program would reimburse flight schools up to \$3,500 or 50% of the cost of retrofit per aircraft, whichever amount is less.
2. Appropriate the budget increase as outlined in the Financial Impacts and Budget Actions section of this report.

## Executive Summary

On April 30, 2013, Council approved the development of a pilot program for retrofitting aircraft used in flight training with mufflers or other sound mitigation equipment and directed staff to include up to \$200,000 for the pilot program in the proposed FY 2013-15 City budget.

This report provides an overview of the criteria to be used to incentivize the program; a recommendation for the maximum allocation of funds per aircraft; and the process to ensure that the equipment approved for this program reduce the overall noise impact to the community.

## Background

In December 2012, staff conducted a noise-level flight-test program to determine the effectiveness of an aftermarket exhaust muffler system in reducing the noise level of the most common flight training aircraft used at Santa Monica Airport. The results of the test, as well as observations by members of the public, indicated that a muffler system designed to reduce the level of the aircraft engine exhaust noise is an effective system that can reduce noise from fixed wing propeller aircraft.

On April 30, 2013, Council approved the development of a pilot program for retrofitting aircraft used in flight training with mufflers or other sound mitigation equipment and directed staff to include \$200,000 for the pilot program in the FY 2013-15 Biennial Budget.

### **Discussion**

The pilot program provides an incentive to flight schools based at Santa Monica Airport that voluntarily retrofit fixed wing propeller aircraft used for flight training with noise mitigation equipment designed to reduce noise levels. The City would provide a reimbursement to flight schools of up to \$3,500 or 50% of the cost of retrofit per aircraft, whichever amount is less. Eligible aircraft includes aircraft owned or leased for use by the existing flight schools. For any leased aircraft operated by the existing flight schools, any aircraft retrofit by this program must be in operation at the Airport as of September 1, 2013, used at the Airport for at least one year after retrofit, and at least 75% of operations within that year must originate from Santa Monica Airport.

This program is designed to cover some of the costs associated with equipping aircraft with Federal Aviation Administration (FAA) approved devices to reduce their overall noise impact. Funding would be provided for a wide range of technologies. There are several technologies that reduce piston-powered aircraft noise such as: enhanced muffler systems; propeller designs; and devices that reduce propeller revolutions per minute (RPM). The pilot program would not be limited to, or single out, just one vendor or one type of device, but provide funding for a variety of FAA approved devices.

Currently, there are 31 aircraft owned or operated by the flight schools at Santa Monica Airport, and the potential cost to retrofit all these aircraft is \$108,500.

### Approval Process

The pilot program would require that all noise mitigation equipment be approved by the Public Works Director or his designee prior to reimbursement. Any proposed equipment would have to provide documentation of an FAA Supplemental Type Certificate (STC)

for the type of aircraft the device is installed upon. In addition, the device must reduce the noise signature of the aircraft on a normal departure profile from runway 21 by 3 dBA Single Event Noise Exposure Level (SENEL) at Santa Monica Airport's remote monitoring site #1 located approximately 1,500 feet west of the end of the runway.

**Financial Impacts & Budget Actions**

The pilot program to retrofit flight training aircraft with sound mitigation equipment is estimated to cost up to \$200,000. The cost to administer the program would be included in this expense. The cost estimate is based on the number of flight training aircraft currently stationed at the Airport. Implementing the program requires an additional appropriation of \$200,000 to account 33431.556250 from the Airport fund balance (non-aviation funds).

**Prepared by:** Stelios Makrides, Acting Airport Manager

**Approved:**

**Forwarded to Council:**



Martin Pastucha  
Director of Public Works



Rod Gould  
City Manager