



**TRUCKEE TAHOE AIRPORT DISTRICT  
BOARD OF DIRECTOR STAFF REPORT**

**AGENDA TITLE:** Federal Contract Tower Program & ADS-B Surveillance Update

**MEETING DATE:** June 27, 2018

**PREPARED BY:** Hardy Bullock, Director of Aviation & Community Services

**RECOMMENDED ACTION:** Receive guidance and provide staff direction on various aviation initiatives designed to reduce community annoyance, enhance safety and optimize existing capacity at the airport.

**DISCUSSION:** Often referred to as the “Three Legged Stool”, the control tower, certified surveillance, and flight procedures work together to control the route and altitude of aircraft arriving and departing KTRK. This report is a routine status update on these three initiatives.

**Contract Tower Program Entry**

Staff was directed to proceed with an application to the Federal Contract Tower Program administrated by the FAA to gain long-term annual funding for our air traffic control tower. The **Senate Appropriations Committee** passed its FY '19 DOT/FAA appropriations bill that includes \$168 million in statutory bill language for the FAA contract tower program (\$3 million more than the final FY 2018 spending for the program). This dedicated and guaranteed funding will fund all current 254 FAA contract towers, including the 16 cost share towers, four new towers expected to be added to the program in FY '18. Also, the Senate funding bill includes important statutory language that removes the FAA-imposed moratorium on new contract tower applicants. This is very important and this allows our airport to apply for entry to the program, receive an application package and develop our benefit cost ratio (b/c ratio) argument for funding. Most experts agree that the FAA reauthorization will pass with support from both

Democrats and Republicans. The House and Senate bills differ slightly but the goal is to pass the full authorization by the end of the August Congressional session.

TTAD has officially expressed interest and the FAA is aware of our intentions to apply for entry to the Federal Contract Tower Program. Within the reauthorization there is statutory language lifting the moratorium on entry allowing TTAD to receive a full application package and submit this to the FAA. Staff will work with our consultant team to complete the required submission items in the meantime.

Staff has meet with Congressman McClintock's transportation staff, AAAE support staff, the FAA and other airports while at the AAAE US Contract Tower Association meeting. Staff is in process of formulating and disseminating a letter which follows guidance published within the FAA Policy 7210.78 *New Start and Replacement Tower Process*. The letter will be delivered to the FAA outlining our initial desire to receive an application and begin the program entry phase. Next steps include a full b/c ratio development by our contractor Dr. Dave Byers with Quadrex Aviation and additional meetings with decision makers within the FAA facilitated by our congressional support team at Rosemont Strategies.

*Attachment 1: Order JO 7210.78 Describing the Tower Program Entry Process*

### **ADSB Deployment**

The airport currently uses Multi-Lateration flight tracking. The FAA's Next-Generation mandate takes effect on January 1, 2020. It is the airport's goal to work with the FAA and Harris Corporation (FAA Prime Contractor) to install a cost shared ADSB flight tracking station(s) covering the airport traffic pattern and the associated approach and departure airspace volume.

The FAA requires an agreement with TTAD prior to working on any deployment engineering or contracting activity. This agreement is called a Reimbursable Agreement. The reimbursable agreement is a contract between the FAA and the TTAD, it accomplishes the following:

1. It allows TTAD to pay for cost associated with the engineering that assures our ADSB station(s) will cover the required airspace volume to provide benefit to the FAA, other system stakeholders, our airport, and the national airspace system users.
2. It allows TTAD to pay for cost associated with integrating the data from the stations into the main air traffic control systems within Oakland Center called the Enroute Automation & Modernization Framework (ERAM).
3. It allows TTAD to pay for cost associated with completing contract details between the FAA and its prime contractor Harris Corporation that allow a contract modification to deploy an ADSB station network, maintain the data feed and create required redundancy.

The cost of this agreement is not expected to exceed \$50,000. The agreement has been reviewed by our legal counsel and it is under review by FAA legal counsel. Expect the final copy by late June.

Harris Corporation has delivered a Rough Order Magnitude Cost (ROM) estimation for the installation and operation of the ADSB system. This cost is based on the following requirements set forth by the FAA:

1. The system meets the required service volume to cover the airport surfaces and existing IFR waypoints supporting IFR procedures at KTRK.
2. The system supports the notional procedure waypoints for new procedures like the Lake Tahoe Visual RNAV, new notional arrival and departure procedures.
3. The system allows coverage of other airspace points that current inhibit simultaneous flight operations within the KTRK airspace volume. Examples include approaches to KTVL and KRNO.

Harris estimates a minimum of two ground stations to operate the system. Staff is working with Harris to investigate the viability of a single station site if it fulfills the above mentioned three main criteria points for the FAA. The ROM includes various cost scenarios ranging from \$1.46 million for the initial service establishment and increasing from there based on additional sites and coverage. If a single station site is viable, cost may be reduced. Harris will undertake additional coverage analysis following the execution of the FAA reimbursable agreement at which time a firm and final estimate of cost will be issued. Staff is working with the FAA to get additional airport funding to assist with the deployment and annual operational cost of the ADSB system.

### **Flight Procedures**

Staff flew with Net Jets in their Citation Jet to test each variant of the Lake Tahoe Visual RNAV. Additional work is needed and Net Jets, Staff, and ABCX2 the District's airspace consultants are working together to refine the procedures for FAA submission. Another wide and high left downwind procedure for 29 was developed and tested. Staff believes it may reduce impact for Net Jets arrivals. Current discussions regarding a signatory incentive contract are progressing. This will allow Net Jets and other operators to receive discounted fees and fuel in exchange for flying certain community friendly routes.

The FAA is reviewing the runway 11 arrival. Other procedures will be handled through an alternative (.41 FAA) process. No timeline is present for the initiation of this process. Staff is working with our congressional support team to identify the barriers.

**WHAT'S NEXT:** Staff will provide a finalized Reimbursable Agreement from the FAA for ADSB project initiation. Harris will provide a firm and final estimate of system cost. Staff will return to the Board for guidance. Staff will work to complete the FAA Contract Tower Application and b/c ratio equations in conjunction with our consultants for submission. Staff will work to complete signatory incentives with operators and refine arrival/ departures procedures for commercial operators. Additional work in Washington, D.C. with our congressional support team will take place over the next few months to remove barriers associated with the airspace and flight procedures review process.

**FISCAL IMPACT:** Significant cost is associated with the tower and the ADSB initiatives. These cost estimates are currently being developed. Staff has rough order cost for various scenarios related to these projects which will be presented to the Board at the annual budget workshop.

**PUBLIC COMMUNICATIONS:** Considerable public outreach is completed and underway. Recent public open house meetings were held at the airport to discuss each initiative and gain feedback. More to come. Other publications including our Connected Newsletter, web postings, and e-blasts contain ongoing information related to each of these initiatives.

**ATTACHMENTS:**

FAA Contract Tower Guidance

Harris Corporation ROM

Sample Reimbursable Agreement