AGENDA ITEM: 6

TRUCKEE TAHOE AIRPORT DISTRICT

BOARD OF DIRECTOR STAFF REPORT

AGENDA TITLE: **Seasonal Control Tower**

MEETING DATE: **March 23, 2016**

PREPARED BY: **Hardy Bullock**

RECOMMENDED ACTION: Consider options 1, 2 and 3 and direct Staff accordingly.

Option 1: Authorize staff to move forward immediately**.**

Option 2: Authorize staff to move forward for 2017.

Option 3: Direct staff to return additional information with a date/ time certain or cancel the project.

DISCUSSION: At the February 2, 2016 Board of Directors annual offsite workshop, the Board discussed the potential benefits and unintended consequences of installing a temporary, non-federally funded airport control tower. Staff presented the following information:

- Request for Information closed January 5, 2016. Four vendors replied with cost and services to provide seasonal temporary tower facilities and staffing at KTRK.
- Rough order of magnitude cost ranges from $400K – 600K for tower service from MAY 1 – OCT 31.
- Four days at Air Traffic Control Association meetings, East Hampton Airport, and discussions with operators, tower providers, and FAA representatives resulted in the following findings:
    - No data indicates additional operations from tower.
    - Tower enhances safety.
    - Tower may or may not enhance capacity.
    - Tower is responsible for directing pilots to use NAP and local procedures based on MOU with District.
    - ZOA will work directly with tower to place aircraft as directed by airport congruent with safety.

- Utilization of a tower is the decision of the airport operator not the FAA.
- Mixed aeronautical uses benefits from the control, oversight, and direction of a tower controller although some operations may see greater restriction and reduced tempo.

Following a comprehensive discussion by the Board, staff was directed to develop a compliment of information to support an informed decision regarding a temporary airport control tower. This information included pricing, availability, and a **detailed description of deliverables achieved through the performance of a temporary tower service contract in the inception year (2016) and subsequent years**. Based on the current timeline for installation some of the products, services, and deliverables of an airport control tower may not be available to the District until year two or even year three of the contract. Listed below in (blue) are some of the general responsibilities of a control tower, these apply to any installation scenario and will be present in all deployment timelines. Below (in green) is a list of deliverables associated with a year one (2016), year two (2017), and year three (2018) tower deployment.

General Responsibilities of an Airport Traffic Control Tower

Advisory Circular 90-938

Maintain familiarity with the positions, equipment, and duties required to operate a Non-Federal Airport Control Tower (NFCT).

Ensure operational continuity during the transfer of position responsibility.

Issue pertinent weather and airport information via SIGMETs, AIRMETs, PIREPS, and NOTAMs, etc.

Maintain training records for each air traffic control specialist in the facility.

Ensure that air traffic control services are provided in a safe, orderly, and efficient manner.

Ensure that each air traffic control specialist in the NFCT manager's employ is properly qualified and current in the application of air traffic control services.

Maintain a comprehensive pilot education program that includes pilot/controller forums to discuss/clarify local procedures and airspace matters.

Ensure that voice recorders and other essential equipment are checked for suitable operation at the beginning of each shift.

Ensure that voice recorder tapes are retained for a minimum of 45 days, excluding tapes containing information pertaining to accidents/incidents. Tapes pertinent to accidents and incidents should be retained as detailed in FAA Order 8020.16, Chapter 7, Paragraph 101.

Ensure a daily record of air traffic operations log is maintained in the operational quarters.

EMERGENCY OPERATIONS AND HAZARDOUS CONDITIONS.

To ensure that emergency operations (for example accidents/incidents) data are documented, it is essential for NFCT air traffic managers to record and report all accidents/incidents in the same manner as would FAA-operated ATCTs (in accordance with FAA Order 8020.16 and 8020.11). The purpose of such reports and records is to provide essential information for follow-up investigations and help in the

development of new procedures and regulations. The NFCT air traffic managers, or a designated representative, upon becoming aware of conditions that are hazardous to a safe operation, should immediately notify airport management to restrict or suspend operations as necessary until the necessary corrections are made.

Year One (2016) Deliverable of a Non-Federal Airport Control Tower (NFCT)

Tower Services 6:30 AM to 8 PM or at the discretion of the District.

Positive tower control of aircraft course and altitude within 4.3 nautical miles (5 SM) of the airport.

Separation of ground traffic up to the non-movement area, roughly the ramp area and hangar rows.

Separation of specialized aviation services such as skydiving, glider, and flight training activity.

Separation of ground vehicles and aircraft in the movement areas such as taxiways and runways.

Support of curfew and calm wind runway utilization.

Support of policy directives such as no touch and gos, no repeat operations, no practice approaches.

Issuance/clearance delivery of VFR and IFR arrival and departure procedures.

Enhance safety during periods of airfield construction.

Year Two (2017) Deliverable of a Non-Federal Airport Control Tower (NFCT)

Memorandum of agreement with Oakland Center for Standard Instrument Departure and Standard Terminal Arrival Routes.

Preferred Runway Program.

Visual Flight Procedures or enhanced use of special procedures to shift traffic toward areas of low residential density. *May require enhanced surveillance*

Year Three (2018) Deliverable of a Non-Federal Airport Control Tower (NFCT)

Visual Flight Procedures.

Next Gen products such as required or performance based navigational procedures.

Surveillance products such as ADSB separation, enhanced clearance delivery and airspace efficiency/ optimization.

WHAT'S NEXT: Option 1 will trigger staff work and corresponding updates to the Board in April. Option 2 will trigger long term planning with updates during the budget process in May and June. Option 3 may have additional updates or no further action.

FISCAL IMPACT: The cost associated with the deployment of an airport control tower is significant. Staff estimates the following cost:

Year One Cost Estimates	
Tower rental, mobilization, demobilization	$148,500
Tower operation from June 15, 2016 to September 15, 2016	$234,500
CONTRACTOR SUBTOTAL	$383,000
Design, Engineering, infrastructure	$25,000
Consultation legal, aviation	$10,000
IT Engineering and surveillance	$6,000
Public outreach printing, advertising	$1,000
Pilot outreach printing, advertising	$1,500
Unknown (2.5%)	$10,663
DISTRICT DIRECT COST SUBTOTAL	$54,163
TOTAL	**$437,163**

PUBLIC COMMUNICATIONS: Considerable public communication is necessary for successful implementation. First and Foremost would be the pilot data publications required to inform the community of pilot users. These include the Airport Facility Directory FAA 5010, multiple data aggregator sites such as AirNav, etc. Additional channels include direct meetings with local pilots and special meetings with routine users such as Surf Air, Net Jets, etc. The local community will be informed through our website, e-blast, Sierra Sun, and KTKE Radio presence.

SAMPLE MOTION(S):

Option 1: Direct Staff to negotiate an agreement for temporary airport control tower services with Midwest ATC for an amount not to exceed $383,000.

O**ption 2:** Direct Staff to continue planning work and budget preparation for temporary airport control tower services for the 2017 operating season.

Option 3: Direct staff to return additional information.

ATTACHMENTS:

1. Presentation Slides