

MEETING AGENDA THURSDAY, DECEMBER 14, 2023 3:30PM – 5:00PM

CALL TO ORDER ROLL CALL RECOGNITION OF PREVIOUS COMMISSIONERS' SERVICE INTRODUCTION OF NEW COMMISSIONERS PUBLIC COMMENT CONSENT AGENDA

- 1. NOVEMBER 16, 2023 MEETING MINUTES P. 2
- 2. NOVEMBER FINANCIAL STATEMENT P. 8
- 3. NOVEMBER AIRPORT DIRECTOR'S REPORT P. 10
- 4. LEASE ASSIGNMENT AND ASSUMPTION 5216 CESSNA Dr, Unit #1 P. 42

### APPROVAL OF CONSENT AGENDA

### AIRPORT DIRECTOR'S REPORT HIGHLIGHTS

### **REGULAR AGENDA**

- 5. ELECTION OF OFFICERS FOR 2024 P. 47
- 6. COMMISSION MEETING DATES FOR 2024 P. 49
- 7. COMMISSION ROLES AND RESPONSIBILITIES TRAINING FOR 2024 P. 51
- 8. FEDERAL CONTRACT TOWER PROGRAM AGREEMENT P. 52
- 9. AIRPORT LAND USE & LEASING POLICY STRATEGY P. 70
- 10. BUSINESS FROM MEMBERS

### PULLED CONSENT AGENDA ITEMS

### ADJOURN

Meetir	ng Planning Ca	alendar
January 18 •2023-2024 Strategic Plan Update •Planning & Development Subcommittee (PDSC) Charter Update	February 15 •Terminal Construction Update	<u>March 21</u>



### Meeting Minutes for November 16, 2023

CALL TO ORDER	Vice Chair Arndt called the meeting to order at 3:37 p.m.
ROLL CALL	Vice Chair Arndt and Commissioners Adams, Burgener, DiMartino, Stooksbury, and Williams were all present.
PUBLIC COMMENT	Scott Holst requested that meetings be recorded and posted publicly.
	Rick Turley recommended that planning stages begin for the development of replacement hangars after the C-hangars are expected to be demolished in five years.
	At the request of Acting Chair Arndt, staff will explore the possibility of posting future meeting recordings for the public and future hangar development will be addressed as part of the Land Use presentation at the next Commission meeting.
CONSENT AGENDA	

Commissioner Stooksbury moved to approve the Consent Agenda. The motion, seconded by Commissioner Adams, carried with all Commissioners present voting in favor thereof.

Pulled Items: Consent Follow up: Public Comments:	None None None	
AIRPORT DIRECTOR'S REPORT HIGHLIGHTS	The C-hangar repair work has been contracted out to Iron Fly Steel Fabrication and is expected to be completed in January. The environmental study for A and B hangar demolition is ongoing.	
	Remote Tower updates will be provided as part of agenda item #6.	
	Terminal construction is on track with steel erection scheduled to begin at the end of December.	
REGULAR AGENDA		
<u>6. Remote Tower Update</u>	Dave Ulane and Bill Payne representing CDOT Division of Aeronautics and Rachel Jackson with Raytheon provided an update of the Colorado Remote Tower Project.	
	Teams from Raytheon and Frequentis have been on the premises to perform a site survey and potentially take over the project from Searidge. Frequentis and Raytheon received	



system design intake approval from the FAA to begin implementing and testing equipment at the Technical Center in Atlantic City in February 2024. Raytheon expects the full System Design Approval (SDA) process to be complete by the end of 2024. Raytheon would tentatively plan on purchasing equipment to install at FNL before SDA is granted to begin testing as soon as possible.

FNL will have the option to pursue a digital tower or a traditional tower path. Both options can be in-process concurrently during the initial phases. The FAA will perform the siting study at the Airport's expense (with the possibility of being reimbursed) as outlined by the Virtual Immersive Siting Tower Assessment process.

All Remote Tower Project equipment currently on site is owned by the FAA, Searidge, and the state of Colorado. To date, the FAA has not provided an official response to Searidge's letter. The FAA will be on site to perform equipment inventory in December.

The FAA is allowing FNL to participate in the Federal Contract Tower program so that they will continue to pay for air traffic controller services. The airport will be responsible for maintaining the facilities and equipment for the mobile tower. Moving the existing radar system from the remote tower building to the mobile tower may cause additional bureaucratic issues regarding the FAA's process requirements.

Acting Chair Arndt requested more information on the FAA's financial contribution and a clear outline of the airport's responsibility before plans are presented to the Airport Commission as an action item.

### Commissioner DiMartino exited the meeting at 4:41 p.m.

Dave Ruppel, Interim Airport Director, and Francis Robbins, Airport Operations and Maintenance Manager, presented this item in accordance with the staff report.

The annual Consumer Price Index adjustment for land and hangar lease rates is 8.11%. A badge fee analysis was conducted and an increase in the badging fees is proposed to cover the Airport's costs associated with materials, staffing, and system maintenance.

### 7. 2024 RATES AND FEES RECOMMENDATION TO CITY COUNCILS FOR ADOPTION



Commissioner Stooksbury recommended no change to the Changar lease fee for 2024 as an act of good will to the tenants.

Public Comment:

Rick Turley requested that badge fees only cover expenses instead of being viewed as a source of revenue.

Diane Jones requested the badge fees be more than the bare minimum cost to help recoup expenses and promote financial stability.

Commissioner Adams moved to recommend the 2024 rates and fees to City Council as presented. The motion, seconded by Commissioner Williams, carried with all Commissioners present voting in favor thereof.

10. Business from Members None.

ADJOURNMENT

Acting Chair Arndt adjourned the meeting at 4:57 p.m.

Respectfully Submitted,

**Commission Vice Chair, Jeni Arndt** 



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**10. Business from Members** None.

ADJOURNMENT

Acting Chair Arndt adjourned the meeting at 4:57 p.m.

Respectfully Submitted,

**Commission Vice Chair, Jeni Arndt** 



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER:

**MEETING DATE:** December 19, 2023

2

**PREPARED BY:** Francis Robbins, Operations & Maintenance Manager

### <u>TITLE</u>

Monthly Financial Statement

### **RECOMMENDED AIRPORT COMMISSION ACTION**

Staff recommend acceptance of the preliminary financial statement as presented.

### **BUDGET IMPACT**

Neutral

### **SUMMARY**

Financial highlights for the month of November include:

• The monthly statement indicates just over \$5.68 million within the net position available for use. In early December the first FAA grant reimbursement for terminal construction was paid in the amount of \$1.97 million. Large capital expenditures and grant reimbursements will be common during the next few months of construction.

### **ATTACHMENT**

Preliminary monthly financial statement for November.



### Airport Statement of Revenues and Expenses From 01/01/2023 - 11/30/2023

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	Y-T-D 2023 Actual	Y-T-D 2022 Actual	Y-T-D 2023 Budget	2023 Total Budget	% of Total Budget
<b>OPERATING REVENUES</b>					
Hangar Rental FBO Rent Gas and Oil Commissions Aviation Fuel Tax Reimbursement Land Lease Land Lease PD Training Ctr Terminal Lease and Landing Fees Parking Miscellaneous	191,290 86,324 269,723 230,884 575,537 309,128 42,004 0 79,062	219,138 86,324 373,488 179,576 490,103 285,114 17,754 0 103,523	233,750 86,293 174,163 152,625 458,337 358,974 11,374 0 132,825	255,000 94,134 190,000 166,500 500,000 391,600 12,400 0 144,900	75% 92% 142% 139% 115% 79% 339% 0% 55%
TOTAL OPERATING REVENUES	1,783,953	1,755,020	1,608,341	1,754,534	102%
<b>OPERATING EXPENSES</b>					
Personal Services Supplies Purchased Services	743,202 86,163 543,000	698,670.11 93,194.83 436,459.01	998,745.00 115,298.00 1,371,326.37	1,089,540 124,900 1,496,860	68% 69% 36%
TOTAL OPERATING EXPENSES	1,372,366	1,228,324	2,485,369	2,711,300	51%
OPERATING GAIN (LOSS)	411,587	526,696	(877,028)	(956,766)	
<u>NONOPERATING</u> REVENUES (EXPENSES)					
City Contributions Passenger Facility Charge Interest Income Capital Expenditures	2,000,000 0 66,272 <mark>(4,335,811)</mark>	0 0 22,637 (831,319)	2,000,000 0 38,250 (23,168,754)	2,000,000 0 51,000 (30,891,667)	100% 130% 14%
TOTAL NONOPERATING REVENUES (EXPENSES)	(2,269,539)	(808,682)	(21,130,504)	(28,840,667)	
NET INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	(1,857,952)	(281,986)	(22,007,532)	(29,797,433)	
Capital Contributions	1,745,063	1,226,160	23,436,000	31,248,000	6%
CHANGE IN NET POSITION	(112,889)	956,324	1,587,927	1,450,567	
NET POSITION, Beginning	21,237,480	19,864,422			
NET POSITION, Ending Investment in Capital Assets Net Position Available for use	21,124,591 15,440,026 5,684,565	20,820,746 15,805,175 5,015,571			



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538

(970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

Date:	December 14, 2023
То:	Northern Colorado Regional Airport Commission
From:	David Ruppel, Airport Director
Re:	Airport Report for November 2023

### **Report Highlights**

- The C-Hangar repair Tenant meeting was scheduled for Tuesday, December 12<sup>th</sup> at 4:30 PM and was accessible both in person and on-line. The work will begin in mid-December on the unoccupied hangars and in the occupied hangars the week of January 8<sup>th</sup>.
- Environmental review of the A and B Hangar demolition is ongoing. Asbestos and lead paint testing has been completed and sent out for evaluation. Coring and soils testing has also been completed and sent out for evaluation. Once those evaluations are completed an RFP will be released for the demolition work.
- The FAA has identified follow-on vendor to replace Searidge, who submitted a letter in October stating its intention to withdraw from the project. The new vendor is Raytheon/Frequentis who will begin their work at the FAA Tech Center in Atlantic City after the first of the year. The Raytheon/Frequentis Team expects to begin development work at FNL as soon as their system receives hardware approval in early summer of 2024.
- Hensel Phelps has installed the first half of the slab and will be installing the final half next week. Steel erection will begin the first week of January.
- Operations updates.

### Airport Activity Dashboard

- Flight operations for the month of November averaged 298 per day, and the twelve-month rolling average is 300.
- Wholesale fuel ordered by the jetCenter FBO was 100,045 gallons for the month of November, a decrease of just under 2% compared to the previous November at 119,997 gallons.
  - Total year to date fuel for jetCenter is down 14% year over year.
  - Total fuel flowage through November is 1,221,673 gallons compared to 1,418,160 gallons in 2022.
- Business jet activity for November compared to the same month in 2022 was down 8%, going from 341 to 314 operations.





### **Airport Owned T-Hangars Update**

Iron Fly Steel Fabrication has been selected to conduct the C Hangar Maintenance and we are coordinating repair implementation and phasing. The airport held a meeting Tuesday, December 12<sup>th</sup> at 4:30 PM, available both in-person and on-line, that included a visual presentation with examples of the work being completed and provided an opportunity to address technical questions. Tenants were invited to share questions before the meeting to provide timely feedback or for those unable to attend at the scheduled meeting time and the meeting was recorded and distributed to hangar tenants afterwards.

The process will vary depending on the type of structural repairs needed and the level of visual accessibility during previous inspections. Hangars have been identified as needing minor repairs or intensive repairs and a separate designation which can be applied to either situation of additional inspection access needed. For units needing minor repairs where the inspecting points are visible and accessible: the repairs are expected to take less than a full day with the aircraft out of the hangar unit, the aircraft can be moved to the ramp. For units needing more intensive work or where the inspection points are not visible/accessible: it is anticipated that aircraft will need to be out of the unit for more than one day and an alternate hangar accommodation will be provided in the C hangars.

At the meeting on December 12<sup>th</sup>, the airport provided a list of hangars by category of minor repair, requiring additional inspection access, and intensive or numerous repairs needed. To assist in aircraft relocation, FNL contracted with jetCenter of Colorado to move aircraft at no expense to hangar tenants.

The anticipated start date for the repair work is mid-December on empty units and storage units, and the week of January 8<sup>th</sup>, for occupied units. Additional updates will be sent in the coming weeks to the group or individual renters as appropriate for coordination. As always, we value your input and patience while we work to improve the safety and structural integrity of these hangars.

### **Digital Tower**

The FAA has identified follow-on vendor to replace Searidge, who submitted a letter in October stating its intention to withdraw from the project. The new vendor is Raytheon/Frequentis who will begin their work at the FAA Tech Center in Atlantic City after the first of the year. The Raytheon/Frequentis Team expects to begin development work at FNL as soon as their system receives hardware approval in early summer of 2024. This is a tactic that the FAA is open to and would significantly accelerate the operational viability process for Raytheon/Frequentis. Raytheon/Frequentis has already completed the document intake portion of the System Design Approval process and visited FNL the week of November 13<sup>th</sup> to evaluate their options at FNL.

### Federal Contract Tower (FCT)

The FAA invited FNL to participate in the FCT Program which is normally reserved for airports with operating towers. FNL is eligible due to an exception created for the Leesburg, TN airport. This allowed airports that have an operating, fully certified Mobile Air Traffic Control Tower (MATCT) to be eligible for the program. The exception expires at the end of this year creating the urgent need for the Tower Operating Agreement, the agreement that establishes an airport in the FCT program, to be completed before the end of the year as well. The FCT program provides funding for the Air Traffic Controllers contracted from Serco for the MATCT.

### Terminal

Foundation work will be completed before Christmas, with the final portion of the slab being poured the week of the 18<sup>th</sup>. Construction is on schedule to begin steel installation in early January.

The DiTesco construction summary is attached.

### Mobile Tower Line-of-Sight

Serco, the company that provides the ATC Controllers, followed up with the FAA concerning continuation of the NOTAM closure of Runway 6/24 during Tower operation hours but a final determination has not been reached. The airport is continuing to push for a response from the FAA for a final determination by the ATO to resolve this issue.

FNL is also working with the FAA and the Digital Tower Project Team to get approval for a STARS repeater display in the Mobile ATCT. The controllers and Air Traffic are in favor of this proposal since it will support better situational awareness and a safer operating environment at FNL. Installation of a STARS display in a Mobile ATCT is considered a non-standard configuration and must be approved by ATO. STARS is the Airport Radar system installed with the Digital Tower System.

### **Governance Study**

City Council representatives have been selected from both the Cities of Fort Collins and Loveland for the Governance Study Board which is expected to meet after the first of the year to begin evaluation of the Governance Study.

### Parking Lot Pavement

The airport has completed replacement of the failing asphalt in the LandLine parking lot with compacted asphalt millings that can be repaired more easily than the existing asphalt. Airport staff also worked with TSA to obtain a change to our Security Program to allow the LandLine buses to pick up and drop off on the airside. LandLine has been operating on the airside since Thanksgiving. Passengers proceed through the Terminal and load on the buses similar to airline passenger loading.

### **Runway Widening Project**

The airport engineer completed an in depth evaluation of construction phasing for the project including 2 stakeholder meetings that involved close to 70 people and a survey effort that received responses from 120 people. 86% of respondents chose a two phase option which keeps the construction period to 160 days and has the least amount of impact on stakeholders. This option ensures safety and constructibility and keeps project costs within expected grant availability. The project is scheduled to begin in 2025.

### **Operations Updates**

In addition to the pavement repairs in the LandLine parking lot, expanded overflow areas have been designated for the heavy holiday loads and parking lot signage has been added to help guide customers. The new rotary broom saw its first use during the Thanksgiving snowstorm and the damaged pavement section on the Northrup Taxilane was repaired.



### **Airport Scheduled Events**

• Airport Administration Offices will be closed December 23<sup>rd</sup> to the 26<sup>th</sup> for the Christmas Holiday and on New Years Day.

### Attachments

- 1. Northern Colorado Regional Airport Terminal Construction Report
- 2. Loveland Fire and Rescue Authority ARFF monthly report
- 3. Remote Air Traffic Control Contract Progress Report #29
- 4. Articles
  - a. Financial concerns troubling half of U.S. airport leaders amidst surging air travel growth.
  - b. Aviation Maintenance Technician Shortage Threatens Post-Covid Rebound
  - c. Using the Leverage They Have: Simple Fixes for Small Airports

### **MONTHLY REPORT: NOVEMBER 2023**

# Northern Colorado Regional Airport Terminal



Foundation construction progress



Underslab electrical installation



Terminal overall progress

### **MAJOR MILESTONES**

 Building grade beam concrete placement is complete

5

- Under slab utility installation is underway.
- Foundation backfill is underway.

### WORK UPCOMING

- Building slab concrete placement.
- Building steel frame erection.
- Building exterior wall framing.



5

### EXPENDITURE TO DATE \$3,374,876

CONTRACT VALUE: \$15,036,433

CHANGE ORDER PERCENTAGE 1%

# DAYS CHARGED TO DATE **136**

ORIGINAL CONTRACT: 422 DAYS

LOOK AHEAD SCHEDULE	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
Building foundation grade beam concrete placement				
Underslab utility installation				
Foundation backfill				
Building slab concrete placement				
Building steel frame erection				
Building exterior wall framing start in February				











### <u>ARFF:</u>

- The 40-hr ARFF position is able to get filled again, so I will be back at the airport on December 26<sup>th</sup>
- So far in 2023, we've had
  - o 17 Alert incidents
  - 10 Diversion flights from DIA due to weather
  - 59 Scheduled air-carrier flights
- January is ARFF training month! Topics and rotation times will be sent out later this month.

### **Scheduled Air-Carrier Flights for December:**

- Currently there are no scheduled flights for December
- The college basketball season has begun and they will sometimes have a scheduled charter flight but may not need ARFF coverage due to passenger count less than 30

### <u>Airport:</u>

- Get connected to Denver flights through Landline! You can search your favorite travel site (ie. *Priceline, Expedia*) and enter Loveland/Fort Collins (FNL) as your departure airport.
  - Kids ride free and parking at NoCo Regional is free! There are over 8 trips a day to Denver International!
  - o <u>https://landline.com/</u>
- Airport Commission meeting will be held on <u>December 14th, 3:30-5:00pm</u> at the Fire Station conference room
- Airport terminal construction is on schedule and well underway! Please see the <u>www.flynoco.com</u> website for all airport commission updates involving the terminal construction!

### Have a Wonderful Holíday Season!!!



November 30, 2023

From: William E. Payne, P.E. To: Colorado Division of Aeronautics

### Section A – Remote Air Traffic Control Contract Progress Report #29

Re: Period: November 1 through November 30, 2023

Activity	Status/Start Date (Projected)	Finish Date (Projected)	Remarks
Remote Tower Implementation			
STARS Operational at FNL	11/25/2022	12/15/2022	Complete
Move STARS Slave Display to Mobile ATCT	8/2/2023		FAA withholds approval
Remote Tower System			
On Hold Pending Successor Vendor			
Remote Tower Testing			
FAA Stop Work Order	10/7/2022	11/11/2022	Complete
Searidge Withdraws from the Project	10/3/2023	10/3/2023	Complete
FAA sends response letter to Searidge	11/14/2023	11/14/2023	Complete
Meeting with succesor vendor - Site Survey	11/14/2023	11/16/2023	Complete
Draft Federal Contrat Tower MOU to FNL	11/14/2023	TBD	FNL is in the process of replying
ORI of the Mobile ATCT	11/28/2023	11/28/2023	Preliminary ORI final in December
NextGen Equipment Inventory and final ORI	12/11/2023	12/14/2023	
	TIDD	TDD	
Certification/Commissioning	IBD	IBD	

### Remote Tower Project Narrative:

The Raytheon/Frequentis team has expressed an interest in being the successor vendor to bring their digital tower system to Northern Colorado Regional Airport (FNL), complete the required testing and have their system commissioned to provide permanent airport traffic control service at FNL.

Before the Raytheon/Frequentis team can bring their digital tower system to FNL, they are required to complete the System Design Approval Process (SDA) at the FAA's Technical Center in New Jersey. To date, they have completed the FAA's SDA document intake process which is a critical step in FAA's evaluation process. Below is a tentative schedule for SDA at the Tech Center:

- 1. February 2024 Install equipment at the Tech Center and airfield camera systems at the Atlantic City International Airport (ACY), where flight testing will occur.
- 2. June-July 2024 Begin Passive system testing at the Tech Center.
- 3. Receive SDA approval late 2024 or early 2025.

Note: The schedule is totally dependent upon the FAA.

On November 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th,</sup> a team from Raytheon/Frequentis performed a site survey of the remote tower system at FNL. The primary purpose of the site survey was to determine the status and useability of the airfield infrastructure and remote tower equipment. Secondarily, the team met with the Division and Airport management to discuss the possibility of becoming the successor vendor at FNL. A representative from Raytheon attended the Airport Commission Meeting to introduce the Raytheon/Frequentis team, discuss their capabilities and address Airport Commission questions. The discussion appeared to be well received.

The Raytheon/Frequentis team indicated that the airfield infrastructure: the three camera masts (with the possible exception of the central mast), fiber communication and power meet or exceed the required configuration. The Raytheon/Frequentis camera mast layout at the FAA Tech Center consists of a central mast and two runway ends mimicking the distributed camera mast configuration at FNL. Because of the FAA's current position that the cameras on the central mast must be redundant (two sets of identical camara arrays) the central mast will be analyzed for load capacity and stability. It is my belief that a redundant camera array is unnecessary, as it is relatively simple to replace the view from a failed central mast camera with the picture from one of the pan-tilt-zoom cameras until the defective camera can be replaced from the spares. Also, it is interesting to note that we only had one camera failure over the past three years of continuous operation (24 hours a day, 7 days a week, 365 days a year).

The camera iris height at FNL was designed to meet the FAA siting criteria. The Raytheon/Frequentis team indicated they may want to increase the height of the central mast to provide a better view of the airfield. It is instructive to note that "the higher you go, the more you see," begging the question of what height is high enough. More precisely, what is the correct height for a given airfield?

The Raytheon/Frequentis team coming to FNL to complete their approval will be beneficial to the State, FNL, FAA and Raytheon/Frequentis in the following ways:

- 1. The State will be able to successfully complete the remote tower, now known as the digital tower project.
- 2. FNL will get a permanent airport traffic control solution in a much shorter time and less expensively than a legacy airport traffic control (ATCT).
- 3. FAA will finally get have a remote tower win after expending millions of State and FAA funds at the Leesburg Executive Airport (JYO) and FNL.
- 4. Raytheon/Frequentis will be able to get the much-coveted Operational Viability Decision (OVD) and system commissioning at an airport as required by FAA. (See the attached FAA "SDA & Commissioning Process" flow chart.)

The next step for the Raytheon/Frequentis team will be to determine what will be needed at FNL to meet the active testing requirements to receive OVD and ultimate system commissioning after achieving System Design Approval (SDA) at the Tech Center.

The FAA sent FNL a draft Memorandum of Understanding laying out the roles and responsibilities of the airport and FAA in order for FNL to become fully accepted into the Federal Contract Tower (FCT) Program. This is important to the airport, as being in the FCT Program means that the controllers working for Serco, the air traffic control services provider, will be funded by FAA's FCT Program.

The FAA Program Implementation Manager Requirements Specialist and infrastructure Protection Specialist were at FNL on November 28, 2023 to perform a preliminary operational readiness inspection to determine if the mobile ATCT meets the FCT equipage requirements. While the preliminary inspection noted 12 items identified as issues to be dealt with, none were considered to be show-stoppers. The final list of issues will be completed after the December 12, 2023, final inspection.

On November 14, 2023 the FAA sent Searidge an acknowledgement of their letter dated October 3, 2023, indicating their desire to withdraw from the remote tower project unless they could get paid. The FAA now considers the relationship with Searidge to be concluded.

Air Traffic has denied the request to move the "Slaved" STARS display from the remote tower control room to the mobile ATCT. The reason given is that locating a STARS display into the mobile ATCT would represent a non-standard configuration and that by allowing this, other airports would want the same ability. To counter this argument, I am preparing a response detailing the reasons that: 1) this is not a non-standard configuration; 2) the situational awareness provided by the display will result in a more efficient operation in the airspace while simultaneously enhancing safety; and 3) the STARS installed at FNL represents a special case.

On December 11, 2023 the NextGen team will be at FNL to do an inventory of FAA and Non-federal equipment. The Implementation Manager will complete the checklist at that time. I will also be on site for this effort.

The Raytheon/Frequentis team has requested the airport send a non-binding letter of intent that will permit them to proceed to prepare a plan to implement their digital tower system at FNL after receiving SDA at the Tech Center.

### **Proposed Remote Tower Testing Phases:**



\*Dependent on local resources' ability to travel to FNL and COVID status.

- Schedule Note: This status is based on the latest proposed schedule and is dependent upon availability of FAA resources to staff the remote tower and support the Phase 1 SRMP.
- Note: The FAA has replaced the term Initial Operating Capability (IOC) with Operational Viability Decision (OVD). This may change again as the terminology of remote tower certification is in flux.

### REMOTE TOWER PROJECT PROGRAM MANAGEMENT

### Program Description/Background

The Program Manager for this project, William E. Payne, will serve as a technical subject matter expert to represent the Division's investment and interest in the Remote Tower and facilitate the project's forward progress to FAA certification and deployment. The Program Manager will participate in and assist with the development of all evaluation, testing, and certification activities, as well as attend all project meetings, and will serve as the technical representative for the Division of Aeronautics during all phases of the project as enumerated below.

Tasks:

1. Provide Technical Representation and Oversight of the Project

Effort this Period: Completed.

2. Participate in Development of the FAA's Operational Safety Assessment (OSA) Basis for Evaluation of Non-Federal Remote Tower Equipment

<u>Effort this Period:</u> The OSA is still in draft form and is continuing to be developed as the project proceeds toward System Design Approval.

# 3. Participate in Development of the Operational Visual Requirements (OVR)

Effort this Period: The OVR Version 2.1 has been issued.

### 4. Participate in Development of the Requirements/Specifications for Non-Federal Tower Equipment

<u>Effort this Period</u>: Participated in the FAA TechOps review and commented on the Remote Tower Requirements Document and prepared comments on OVR 2.1. Completed.

### 5. Assist with Development of System Configuration

<u>Effort this Period</u>: The system configuration will be modified based on lessons learned 4K cameras and displays for demonstration onf March 27, 2023.

### 6. Modify System Configuration Based on Testing Phase Comments

Effort this Period: Completed by Searidge.

### 7. Run Periodic Tests of the Remote Air Traffic Control Tower System During Periods of Evaluation/Testing Inactivity

Effort this Period: Complete.

### 8. Attend System FAA Technical Interchange Meetings (TIM)

<u>Effort this Period:</u> Provided SME representation in the recent FAA discussion of OVR 2.1. Completed.

### 9. Participate in FAA Configuration Review Board (CRB) Activities

<u>Effort this Period:</u> NextGen has yet to establish the CRB. This effort may be rolled into development of the Remote Tower AC.

10. Evaluate an Air Situation Display in Preparation for Testing Against Standard Terminal Automation Replacement System Radar Equipment (STARS).

Effort this Period: Complete.

### 11. Collaborate with FAA on Alternate Phase 1 Virtual/Remote Testing

Effort this Period: Complete

## 12. Work with FAA to develop and Implement Phase 1 Passive Remote Tower Testing

Effort this Period: Complete

# 13. Work with FAA to Develop and Implement Phase 2 Active Remote Tower Testing

Effort this Period: There has been no activity on this task this period.

## 14.Work with FAA and FNL on Phase 3 Industry-Led Initial Operational Capability (IOC)

<u>Effort this Period</u>: This task has been renamed Validation & Verification (V&V.) There has been no activity on this task this period. Phase 3 Active Remote Tower Testing will begin after Phase 2 Active Remote Tower testing is complete and the SRMD has been signed.

# 15.Work with FAA on Phase 4 Remote Tower System Certification and Commissioning

<u>Effort this Period:</u> There has been no activity on this task this period. Phase 4 System Design Approval and Commissioning will begin after the conclusion of Phase 3 V&V and the SRMD has been signed.

### 16.Participate in Development of the FAA's Advisory Circular (AC) for Remote Tower Systems for Non-Federal Applications

<u>Effort this Period:</u> Continue participation in the FAA TechOps TIM to review and comment on the Remote Tower Advisory Circular.

### 17. Provision of Regular Written Reports, Presentations and Updates on the Project's Progress to Internal and External Stakeholders

Effort this Period: Preparation of the monthly Program status report.

# 18. Travel as Needed (In-State and Out of State) for Meetings with FAA, Airport and Division Personnel

<u>Effort this Period</u>: Travel to FNL for meetings with Airport Board and the Cities of Fort Collins and Loveland.

# DEVELOPMENT OF POTENTIAL ENHANCED SITUATIONAL AWARENESS TOOLS FOR NON-TOWERED AIRPORTS

### <u>Tasks:</u>

1. Explore the Potential Development of a System Consisting of Existing and New Surveillance Sources that can be Deployed, Owned and Operated by Non-Towered Airports to Provide Airport Staff with Improved Visibility into the Local Airspace and on the Airport Surface, with the Ultimate Goal of Improving Aviation Safety and System Efficiency.

Effort this Period: No activity this period.

2. Prepare System Requirements to be Used by Airports and/or the Division when Seeking Vendor Proposals to Implement a Situational Awareness System.

Effort this Period: No activity this period.

### **Glossary of Project Technical Acronyms**

ADS-B	Automatic Dependent Surveillance – Broadcast
AGL	Above Ground Level
ARTCC	Air Route Traffic Control Center
ASDE-X	Airport Surface Detection Equipment – Model X
ASOS	Automatic Surface Observation System
ASR-9	Airport Surveillance Radar – Model 9
AWOS	Automatic Weather Observation System
ATC	Air Traffic Control
ATIS	Automatic Terminal Information System
AJT	Air Traffic Services
АЛ	Safety Technical Training Services
AJV	Mission Support Policies and Procedures
CTAF	Common Traffic Advisory Frequency
ERAM	En Route Automation Modernization
FAA	Federal Aviation Administration
FAT	Factory Acceptance Test (alternately - First Article Test)
FDIO	Flight Data Input/Output
FTI	Federal Communications Infrastructure (Harris Corp.)
GA	General Aviation
HITL	Human In the Loop
HMI	Human Machine Interface
ILS	Instrument Landing System
IOC	Initial Operating Capability
IMC	Instrument Meteorological Condition
LOA	Letter of Agreement
MLAT	Multilateration
MSL	Mean Sea Level (above)
NAS	National Air Space
NATCA	National Air Traffic Controllers Association
NESG	NAS Enterprise Security Gateway
NextGen	Next Generation Air Transportation System
NORDO	No Radio
OSA	Operational Safety Assessment
OTW	Out of the Window
OVD	Operational Viability Decision
RSA	Runway Safety Area
SAT	Site Acceptance Test
SDA	System Design Approval
SMR	Surface Movement Radar
SMS	Safety Management System
SRA	Safety Risk Assessment
SRMD	Safety Risk Management Document
SRMDM	Safety Risk Management Document Memorandum
SRMP	Safety Risk Management Panel
SHA	System Hazard Analysis
SSHA	Sub-System Hazard Analysis
STARS	Standard Terminal Automation Replacement System
SWIM	System Wide Information Management
TAMR	Terminal Automation Modernization and Replacement
TRACON	Terminal Radar Control Facility
UHF	Ultra High Frequency
VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	Visual Meteorological Condition
	0

### ATTACHMENTS

- FNL "Draft Graphic Remote Tower Timeline" as of November 30, 2023.
  FAA "SDA & Commissioning Process" Flow Chart.

## Colorado Digital Tower Timeline (Draft)



Complete

Critical Path Task

TBD – To Be Determined

**OVD** – Operational Viability Decision

V&V – Validation & Verification

**ORI - Operational Readiness Inspection (Mobile ATCT)** 

# **SDA & Commissioning Process Overview**



For a system to become operational in the NAS, the vendor system must obtain SDA AND successfully complete all Commissioning Activities

#### Notes:

- SDA requires positive AT Functional Acceptance Decision (FAD); FAD and SDA are achieved at the NARTP/ACY Testbed
- · Once SDA is achieved system will be added to QVSL
- Commissioning requires positive AT Operational Viability Decision (OVD); OVD happens during the site acceptance and is site dependent (after SDA and QVSL)



Federal Aviation Administration

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# Financial concerns troubling half of U.S. airport leaders amidst surging air travel growth

51% of airports' revenue has not recovered to levels seen pre-pandemic

92% identify attracting new airlines and upgrading legacy technologies and systems as top commercial priorities

89% seek federal funding, including from President Biden's Bipartisan Infrastructure Law, to bolster continued growth

**November 28, 2023**: A new report from **AeroCloud**, the intelligent airport management platform that improves collaboration and operational efficiencies, reveals that despite a surge in air travel, 48% of U.S. airport leaders express apprehension about their financial stability. Post-pandemic recovery exhibits regional disparities, as 37% of airport leaders report lingering debt levels, reflecting an uneven economic rebound.

Findings from the *Getting on the Runway to Growth* report, a comprehensive survey of 100 U.S. airport leaders conducted as part of a global study involving 200 airport leaders, show that 51% of U.S. airports haven't seen their revenues recover to levels seen prepandemic. Recognizing the importance of growth, U.S. airport leaders plan to prioritize two key initiatives including increasing growth margins (93%) and optimizing and increasing capacity for take-off and landing slots (95%) to capitalize on the current surge in air travel.

However, U.S. airports face several hurdles in achieving this growth:

- 1. **Staffing issues:** As the boom in air travel continues, 45% of U.S airports are currently grappling with staffing shortages to cope with the increasing demands of flights and passengers. A concerning 61% of airport leaders identify this staffing challenge as a significant risk to their operations in the upcoming 12 months.
- 2. Limited capacity: Over one-quarter (26%) of U.S. airports are hampered by insufficient terminal space, preventing the addition of more airlines and posing a threat to their expansion and growth.
- 3. Sluggish passenger spending: While U.S. airport leaders prioritized consumer spending as their number one revenue driver, 67% anticipate negative impact on passenger spending with concession partners and essential ancillary revenues due to the ongoing cost-of-living crisis.
- 4. **Disruption and flight cancellations:** A significant concern looms as 71% of airport leaders express fear over the repercussions of disruptive events beyond their control, including delayed flights, air traffic faults or extreme weather. Furthermore, 75% emphasize how flight cancellations can adversely affect their reputation with passengers.

**George Richardson, CEO and co-founder, AeroCloud, said:** "The U.S. aviation outlook is robust, yet numerous airports are struggling with the challenge of meeting escalating passenger demand. While 89% of U.S. airports underscore the importance of securing federal funding, such as the Biden Infrastructure Bill, as a key commercial priority for long-term growth, they still have immediate concerns surround staff shortages and terminal capacity limitations. Presently, airport leaders are prioritizing exploring strategies to optimize their operations and maximize existing capacity, aiming to accommodate more airlines and passengers and thereby enhance their revenue."

#### Getting on the runway to growth

Airport leaders identified four areas where they see opportunities to boost their growth:

- 1. Attract new airlines: Given 50% of U.S. airports state they have yet to fully restore all routes served before the pandemic, it's not surprising almost all hope to increase flight numbers by attracting new airlines (93%) and optimizing take-off and landing slots to increase capacity (95%). To facilitate these goals, airports are planning to enhance gate management to accommodate new entrants, provide airlines with access to airport operational data for improved visibility, and reduce upfront investment and ongoing costs through the implementation of common-use facilities, such as shared check-in desks.
- 2. Boost passenger experiences: U.S. airports acknowledge the significance of securing high rankings for passenger experiences such as by Skytraxx to increase the number of passengers (92%). Their commitment to improving the passenger journey includes efforts to reduce security wait times, ensure a seamless experience throughout the airport, and introduce additional common-use self-service tools for check-in and bag drop.
- 3. **Increase passenger spending**: Aiming to enhance revenue, 90% of U.S. airports aspire to increase spending in concessions and Duty Free. Their strategy involves transforming the airport into a shopping destination for more pre-planned purchases, offering a diverse range of retail outlets, and reducing time spent in check-in and security processes to allow passengers more time in concessionary areas.
- 4. **Transform airport operations:** The upgrade of legacy technologies and systems stands out as a top priority for 92% of U.S. airport leaders, paving the way for increased operational efficiency and better management of disruptive events. Notably, 60% recognize the avoidance of investments in new technologies, including SaaS platforms, automation and AI, as a significant risk to optimizing airport operations over the next 12 months.

#### 11/29/23, 9:25 AM

#### Financial concerns troubling half of U.S. airport leaders amidst surging air travel growth | Airport Improvement Magazine

**George Richardson continued**, "Numerous airports in the U.S., mirroring the global trend, still depend on legacy systems and technologies. This diminishes their efficiency in managing existing assets and their ability to onboard new airlines, a crucial factor in capitalizing on the increase in passenger demand for air travel.

"In fact, 43% of U.S. airport leaders revealed they still utilize Excel and Word documents for storing and managing operational information, such as for gate management and the RONs (Remain Overnights). Relying on manual processes and legacy systems poses massive hurdles to their revenue growth. Airports must look towards the future to secure the next stage of their growth by embracing the advantages of artificial intelligence, computer vision and the cloud."

For recommendations on where airport leaders should focus investments to drive the biggest impact on their operations, revenue and growth, download AeroCloud's **Getting on the Runway to Growth** report. <u>https://bit.ly/47KLbYj</u>.

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### **Predict to Prevent**

Predictive maintenance can lower cost and improve efficiency in...

March/April 2023

# Aviation Maintenance Technician Shortage Threatens Post-COVID Rebound

AARON KARP

As demand for aviation roars back generally—and for passenger airline services in particular—demand for aviation maintenance technicians (AMTs) is rapidly rising. Now, a long-feared AMT shortage has arrived, according to experts and industry forecasts, and is not expected to get better anytime soon.



Aviation Maintenance Institute

This year marks the beginning of a prolonged shortage of AMTs that could have a sweeping impact, especially for airlines needing to keep aircraft in the air to meet growing passenger demand, according to management consultancy Oliver Wyman, which regularly surveys the aviation maintenance, repair, and overhaul (MRO) sector.

"While the possibility of an aviation mechanics shortage has been discussed for years, the industry in North America is finally expected to face one in 2023," Oliver Wyman found in a recent look at the industry. "The wave of aging baby boomers and not enough Generation Z workers are being felt in yet another labor sector."



AAR Corp

Oliver Wyman's most recent Global Fleet and MRO Market Forecast anticipates "a shortfall of somewhere between 12,000 and 18,000 aviation maintenance workers [in 2023 in North America]. The imbalance between supply and demand will persist and even worsen over the next 10 years. It is likely to result in fewer flights and delays and cancellations, or airlines having to compensate by keeping more spare aircraft and parts on hand."

The supply of new AMTs "is flat and it has been flat for a long time," Crystal Maguire, executive director of the Aviation Technician Education Council (ATEC), told Avionics International. "With the trends we're looking at moving forward—the number of folks retiring [and robust and growing passenger demand]—the gap is just going to widen."



AAR Corp

ATEC's latest Pipeline Report, which tracks the number of rising AMTs, said that the industry will need at least 20% more maintenance technicians than are currently being trained to meet projected workforce demand.

Boeing, in its 2022–2041 Pilot and Technician Outlook, predicts 610,000 new aviation technicians will be needed globally through 2041, about a third of which will be needed in the U.S. "to meet demand from fleet operators and providers of maintenance, repair and overhaul services."

"The combination of fleet growth, attrition and replacement will continue to drive high demand for [AMTs for] the foreseeable future," according to Boeing's outlook.



Over the last six months, the AMT shortage "got really real, really fast," Joel English, executive vice president of the Aviation Institute of Maintenance, told *Avionics International*. An already aging AMT workforce saw a slew of early retirements during the COVID-19 pandemic, which pushed a pending shortage into an actual shortfall. The Aviation Institute of Maintenance is an umbrella organization managing 14 FAA-certified AMT school campuses across the U.S.

"So, there was this shortage pending and, well, what happens when all the retirements happen? When COVID hit, most of the airlines did early retirements to just about everybody they could, including mechanics," English said.

Compounding the pending shortage was the pandemic-related drop-off in new AMTs entering the workforce. ATEC estimated that the pandemic cost the industry 5,000 new mechanics.

As a result, even after the pandemic retirements, the AMT workforce remains older. "By 2031, two out of every five current mechanics [in the U.S.]—more than 90,000 mechanics in total—will reach retirement age," the ATEC report said.

Oliver Wyman's projected worst-case forecast would see a shortage of 48,000 aircraft maintenance workers—a shortfall around 27%—by 2027 in North America. "Our more likely scenario predicts a gap of almost 43,000, or more than 24%" by 2027, ATEC said.

### **An Attractive Career**

While MRO providers and airlines struggle to hire enough maintenance personnel, the shortage has created an attractive opportunity for young people interested in a career in aviation maintenance.

"What do I say to somebody who's thinking about [going into aviation maintenance]? My answer is there are employers lined up to hire our two-year aviation students and they go to work making \$55,000-\$60,000 a year," English said.



Aviation Maintenance Institute

According to the U.S. Bureau of Labor Statistics, the median salary for an AMT in the U.S. in 2021 was over \$65,000, including a high of more than \$83,000 in the state of Connecticut. Those salaries are expected to continue increasing.

Airlines and MRO providers "just keep raising wages," Maguire said. "You'll eventually start attracting more folks if wages continue to climb."

A number of airlines—including American Airlines, regional Piedmont Airlines and low-cost carrier Allegiant Airlines—are starting to partially subsidize AMT education (typically costing around \$12,000 in total) in exchange for students signing commitments to go work for the airline providing financial assistance.

"Airlines are saying, 'We need your graduates and we need them fast.' It's turned out to be wonderful for our students," English said. "Airlines are helping students pay for their tuition with a written agreement that they'll come to work for the airline afterwards. It reduces tuition cost, reduces the student loan debt that our students have and gives students the great news that you have a job waiting for you when you graduate."

Even with such incentives, the AMT shortage is not subsiding. "The bad part is that the airlines are still struggling to fill" their need for mechanics, English said. But airlines will find paying upfront tuition costs will pay off, he added.



AAR Corp

"Obviously, any company would rather be able to choose from graduates rather than pay upfront, but the reason it actually does make financial sense is airlines were having to pay moving expenses and convince students to move to where airlines have a need and give sign-on bonuses," he said. "Whereas the students [receiving] tuition-cost help [commit to] sign on with an airline, so the airline can put what was the sign-on bonus toward tuition."

And AMTs receiving financial help with school will have a reduced college loan debt, "so it's better, when it comes down to it, for all parties," English said.

English and Maguire both say MRO providers and airlines need to have outreach programs in which high school, or even younger, students are introduced to the prospect of a potential career in aviation maintenance.

"What we've found is that young people rarely think about the possibility of becoming a pilot or aircraft technician because the job seems exotic or beyond their reach," English said. "But we know that there is a clear pathway to these careers."

Maguire agreed, saying, "A lot of folks say it's not just about high school, it's also about [reaching out to] middle school and elementary school students, which I would not disagree with."

ATEC and other organizations are looking to team up with high schools to build pathways to aviation maintenance careers, perhaps starting in ninth grade. The message to prospective students is first and foremost a financial one.

"You're coming out of school and you're making as much as \$65,000-\$70,000 a year and you are on a path to a six-figure [annual salary] career. So, for us, that is a pretty easy story to tell, especially when we're in front of [students'] parents," Maguire stated.


AAR Corp

### **FAA Regulatory Change**

A new rule implemented last year by the FAA revising Part 147 regulations governing AMT schools will also likely help move aviation maintenance students into jobs more quickly and, according to the agency, allow schools to use curriculums that align with current industry standards. Previous requirements for AMT schools were almost 50 years old. The new rule will enable schools to teach students with a curriculum that incorporates new innovations and technologies, as well.

Maguire said the new rule emphasizes competency and proficiency over timebased training requirements that have guided aviation maintenance schools for nearly half a century.

"Schools, I think, are still trying to get their arms around [the rule change] and we'll see a lot of changes probably next year," she said. "The industry should be very pumped because this does mean that they should be getting higher quality candidates and there are opportunities to cut training time as well."

English noted there are around 180 FAA-certified aviation maintenance schools in the U.S.

"Believe it or not, the airframe and powerplant curriculum has not significantly changed since the 1960s," he explained. The new rule also emphasizes technological advances, "so our students will learn [advanced] avionics as well."

Avionics maintenance is more "plug-and-play" than airframe or engine maintenance, English said, requiring a high level of competence in computerdriven MRO work.

Regardless of the recruiting efforts and curriculum changes, however, the AMT shortage is expected to be a challenge MRO providers and airlines will likely have to grapple with for the rest of this decade and beyond.

Speaker's Precís



### Using the Leverage They Have: Simple Fixes for Small Airports

A Summary of New Research, including Findings and Recommendations for the Improved Management of Small Airports, by Dr. Michael Jones

(Washington, DC) New research from the University of Florida has found that 84% of the nearly 5,000 public-use airports in the U.S. are owned by cities, towns and counties. Of those, approximately 54% are delivering sub-par performance due to simple mis-organization. This condition costs each airport an average of \$20 million annually in lost economic impact.

While most Americans are very familiar with the big commercial airports, the vitality and success of smaller airports also is important both locally and nationally. The total economic contribution of G.A. airports is in the range of \$100-\$150 billion annually. If all of the underperforming airports were operating near their theoretical potential, those numbers would increase by about \$35 billion.

"Some small airports are great to visit, but many are economic ghost towns. And, because they're owned by governments, they can linger like zombies for years, without anybody making an effort to fix the problems," said Dr. Mike Jones, the principal researcher of the study. Jones feels these failures are a missed opportunity. "Airports should be dynamic; they should be economic engines actively helping towns to grow, to create jobs and businesses, and help young people find careers."

Jones' research quantified the difficulties governments have in managing for-profit businesses.

"When you think of the Department of Motor Vehicles or the Post Office, they are good examples of governments agencies, and they try to provide a basic level of service to everybody in a fair and impartial manner," Jones notes. "Meanwhile, for-profit businesses do the exact opposite, trying to thrill a narrowly-defined group of customers. That kind of target-marketing just isn't in the DNA of a government agency. They don't have the organizational structures, the vocabulary, or even the reward systems to make it work."

In short, to have a successful local airport, the statistics show it needs to be removed as far as possible from traditional government structures and processes.

Jones and his colleagues tested the hypothesis that a "single-function" organizational design would out-perform a "multi-function" organizational design. A single function design is found when the organization has total autonomy to operate, to invest, and manage the business for the best needs of the customers. A multi-function design lumps the organization into other operating departments. A common example is when the airport is run out of the Parks Dept. of a city or within the Highway Dept. of a county.

The differences can be striking. In many instances, the local airport is the ONLY public organization which is expected to operate self-sufficiently, without tax dollars. Often it is the ONLY public organization expected to produce a profit and the ONLY organization with "customer service" in employee titles.

"Airports need to be run by experts," Jones explained. "Most politicians simply don't know much about aviation, or about grant assurances, runway lighting, about the market for hangars and rents, or about Part 139 requirements, and the thousand other little details that matter so much to a great airport." These differences mean a small airport is enormously different from the Highway Dept. or the Parks Department.

Jones developed about a dozen organizational decisions that airports easily could implement which would dramatically boost their performance. Airports which used their optimal organizational design produced economic returns *twenty times greater* than the poorlymanaged airports. Even after controlling for population, economics, geography, and airport facilities, *single-function airports out-performed multi-function airports by more than 60%.* This raises the total economic impact of an average airport from about \$30 million to over \$50 million. In turn, this creates hundreds of extra jobs and millions of dollars in new wages.

The examples of mismanagement abound, like the ancient torture of "death by a thousand cuts." Each mismanaged airport hurts the community it should be serving, and it hurts aviation at large.

"I have heard of dozens of examples of politicians making perfectly logical political decisions which were completely wrong for an airport," Jones said. "A great example is closing the FBO at 5pm, or closing it on public holidays, because all government offices close at 5pm and on public holidays. Another example is forcing the airport to use clumsy fund accounting systems which can't even produce a profit and loss statement."

Among the many recommendations derived from the study, a few items are key:

 The best airports are operated by autonomous airport authorities (or boards, districts or similar terms) which have their own budget separate from the government which may own the airport. This also means they have their own borrowing power, purchasing protocols, legal services, human resources practices, and keep their books in the style of a for-profit business (as opposed to fund accounting procedures).

- As with any human endeavor, there are "bad" airport authorities, and airports operated by bad authorities are indistinguishable from the ones run as part of a government agency.
- Airline service is a dead-end for most airports, and in most instances G.A. airports with limited commercial service did not do as well as their peers without such service. As Bill Swelbar commented, "Small airports put too much emphasis on commercial services. Getting a business on the airport is much more impactful than an airline with two departures a day."
- Shared or remote airport authorities are a bad idea. If an Airport Authority manages several airports, the largest airport prospers and the subordinate airports whither.
- Airports which delegate the operation of the airport to a private company (in effect, "privatized" airports) are convenient for politicians but almost always under-perform.
- Airports with volunteer "Advisory Boards" showed no statistical improvement which would indicate those volunteers are persuading the politicians to make better decisions.
- There are twelve specific features found on the best airport web sites which build traffic and boost community engagement.

"It should be no surprise that better management produces better outcomes," Jones explained. "But what's unique, what's really new here, is this study actually quantifies the havoc created by an inappropriate organizational chart. It defines the cost of having a boss who either doesn't care about the business or doesn't know about the business. Knowing how much money is being lost is the first step in justifying the effort and the investment to change the system."

### Background

The Swelbar-Zhong Consultancy is a boutique firm in Washington, DC which provides industry analysis to aeronautical companies, airlines and airports of all sizes. Most of the firm's efforts involve benchmarking airport performance, analyzing strategies and measuring impacts. The firm also serves as a trusted and expert voice on industry issues; you will often see the firm quoted in the Wall Street Journal, Aviation Week & Space Technology, and other prominent media.

Dr. Jones is a consulting associate with the firm, specializing in G.A. airports. Dr. Jones has enjoyed a forty-year career in business, first in marketing with AT&T and then with a start-up industrial company. He has worked in more than 60 countries, published more than forty technical articles and has presented at industrial conferences on four continents. Jones served for eight years on the Pinehurst (NC) Airport Authority, most recently as chairman. He's a veteran of the U.S. Air Force, a 4,000 hour commercially-rated pilot, and is a well-known aviation writer featured monthly in Cessna Pilots Magazine (Cessna.org). He earned his doctorate at the University of Florida (2023) and also attended Columbia University (M.B.A., 1976) and Grove City (PA) College (B.A., 1973).

Interested parties can reach Dr. Jones at PilotMike2012@gmail.com.



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER:	4
MEETING DATE:	December 14, 2023
PREPARED BY:	Aaron Ehle, Airport Planning & Development Specialist

### <u>TITLE</u>

Lease Assignment and Assumption - 5216 Cessna Dr, Unit #1

### **RECOMMENDED AIRPORT COMMISSION ACTION**

Make a motion to approve the lease assignment and assumption as presented

### **BUDGET IMPACT**

Neutral, the lease rates will remain unchanged

### **SUMMARY**

This is an administrative item. The transfer of ownership of privately owned buildings is frequent on the Airport and requires the approval of the Airport Commission for a lease assignment and assumption. In this case, the lease is being transferred from the current owner, Romeo Whiskey, LLC to JK AV8 LLC. Staff have reviewed the request and found the associated account to be in good standing.



### **ATTACHMENT**

5216 Cessna Dr, Unit #1 Lease Assignment and Assumption

#### ASSIGNMENT AND ASSUMPTION OF LEASE AGREEMENT

5216 Cessna Drive, Unit #1 Loveland, Colorado 80538

WHEREAS, the Cities of Fort Collins and Loveland, Colorado (the "Cities") acting by and through the Northern Colorado Regional Airport Commission ("NCRAC") are the Lessors under that Lease Agreement dated August 19, 2021, a copy of which is attached hereto as Attachment 1 and incorporated herein by this reference (the "Lease Agreement") to Romeo Whiskey, L.L.C., a Colorado limited liability company, as Lessee ("Assignor") concerning that property at the Northern Colorado Regional Airport described in Exhibit A to the Lease Agreement (the "Lease Agreement"); and

**WHEREAS**, the Cities are parties to an Amended and Restated Intergovernmental Agreement for the Joint Operation of the Northern Colorado Regional Airport signed on January 22, 2015 and paragraph 4.A. of said Agreement delegates to the NCRAC the authority to enter into lease agreements in a form generally approved by the Cities; and

**WHEREAS**, the form of this lease agreement has been previously generally approved by the Cities; and

**WHEREAS**, Commission Bylaws adopted on October 15, 2015 authorize the Commission Chair to sign such agreements on behalf of NCRAC; and

**WHEREAS**, Assignor desires to assign all of its lease rights and obligations for the Leased Premises, as well as all improvements located thereon, to JK AV8 LLC, ("Assignee"); and

WHEREAS, Article 13 of the Lease Agreement permits this assignment under the conditions as set forth therein; and

**WHEREAS**, Assignee intends to benefit the Cities by promising to perform all terms and conditions of the Lease Agreement with respect to the Leased Premises as Lessee under the Lease Agreement.

**NOW, THEREFORE**, in consideration of the Cities' approval, the mutual covenants and agreements expressed in the Lease Agreement, the mutual promises and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Assignor, by its signature below, hereby assigns all of its right, title and interest in and to the Lease Agreement and the Leased Premises, to Assignee as of December 14, 2023 (the "Effective Date").

2. Assignee, by its signature below, hereby assumes and agrees to be bound by all obligations, responsibilities and terms of the Lease Agreement with respect to the Leased Premises and hereby becomes the Lessee of the Leased Premises under the Lease Agreement as of the Effective Date.

3. Assignee acknowledges and agrees that the annual rent payment for the Leased Premises under the Lease Agreement is 679.65 per year, payable in monthly installments, which rental amount shall be adjusted on May 1, 2024 and on each anniversary thereafter pursuantto Article 4 of the Lease Agreement.

4. Assignee submits to the Cities herewith, the proof of insurance as required in Articles 8 and 9 of the Lease Agreement, attached hereto as **Attachment 2** and incorporated herein by this reference.

5. Assignee submits to the Cities the following notice address pursuant to Article 23 of the Lease Agreement:

Attn: Jeramiah Larsen JK AV8 LLC 4691 Concorde Ave Unit 1A Johnstown, CO 80534 970-980-6501 jeramiahlarsen@gmail.com

6. The Cities designate the NCRAC and the Airport Manager as its representatives who shall make, within the scope of their authority, all necessary and proper decisions with reference to the Lease.

7. For purposes of this Agreement, there may be any number of counterparts, each of which shall be deemed as originals. Facsimile, scanned and other electronic signatures permitted by law, for purposes of this Agreement, shall be deemed as original signatures.

Dated this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_\_.

[end of page 2

	Assignee: JK AV8 LLC 4691 Concorde Ave Unit 1 Johnstown, CO 80534	A		
	By: Jeramiah Larsen, Registered	l Agent	-	
State of Colorado ) )ss County of Larimer )				
Subscribed and sworn	to before me this	day ofday ofday_	, 20	by
My commission expire	2S		SEAL	
:	Notary Public Assignor: Romeo Whiskey, LLC 6212 Feldspar Ct Bellevue, CO 80512			
	By: Robert E. Warmack, Sole M	ſember	-	
State of Colorado ) )ss County of Larimer )				
Subscribed and sworn, as,	to before me this	day of of	, 20	by 
My commission expire	es		SEAL	
	Notary Public			

The Northern Colorado Regional Airport Commission acting on behalf of the City of Loveland, Colorado and the City of Fort Collins, Colorado, hereby consents to the above-described assignment of all right, title, and interest as Lessee under the above-described Lease Agreement from Assignor to Assignee on the terms and conditions set forth above.

Northern Colorado Regional Airport Commission acting on behalf of the City of Loveland, Colorado and the City of Fort Collins, Colorado

By:\_\_\_

Commission Chair

ATTEST:

Secretary

APPROVED AS TO FORM:

m 1. Senior Assistant City Attorney



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER: 5

**MEETING DATE:** December 14, 2023

PREPARED BY: Kate Morgan, Airport Executive Assistant

### <u>TITLE</u>

**Election of Officers** 

### **RECOMMENDED AIRPORT COMMISSION ACTION**

Conduct the election of officers to serve during the 2024 calendar year that includes the Chairperson, Vice Chairperson, and appoint the Secretary.

### BUDGET IMPACT

Neutral

### **SUMMARY**

The Airport Commission's Bylaws in Section 6 state that an election or appointment process be held periodically for the Chair and Vice Chair positions on the Commission. The bylaws also require that the Airport Commission appoint a secretary. This process has been conducted on an annual basis in advance of the new year. The adopted Bylaws of the Airport Commission pertaining to officers and personnel can be seen below:

### Section 6. Officers and Personnel.

a. Election of Officers. The officers of the Commission shall be a Chairperson and Vice-Chairperson, and such other officers and assistant officers as may be authorized by the Commission from time to time, to perform such duties as may be approved by the Commission. All officers shall be elected by a majority of the Commission Members present and voting. The Chairperson and Vice-Chairperson shall be members of the Commission. The Commission shall appoint a secretary, who need not be a member of the Commission. At the first meeting of the Commission, the Commission Members shall elect a Chairperson and Vice-Chairperson and appoint other officers who shall serve in their elected or appointed capacities, as applicable, for the remainder of the 2015 calendar year and for the full 2016 calendar year. Thereafter, officers shall be elected or appointed, as applicable, annually by the Commission Members at the Commission's last regularly scheduled meeting of each calendar year to serve a one calendar year term. Vacancies may be filled and new officers may be appointed at any meeting of the Commission. b. Chairperson. The Chairperson shall preside at all meetings and, except as otherwise delegated by the Commission, shall execute on behalf of the Commission any legal instruments approved by the Commission except contracts and agreements that may be signed by the Airport Manager as authorized by the Commission. The Chairperson shall execute all ministerial documents on behalf of the Commission. The Chairperson, subject to these Bylaws, shall decide all points of order or procedure unless otherwise directed by a majority of the Commission present. The Commission, by a majority vote of all Commission Members, shall adopt meeting procedures that assure an orderly and focused discussion and facilitate the input of all Commission Members.

c. Vice-Chairperson. The Vice-Chairperson shall perform all of the Chairperson's duties in the absence of the Chairperson.

d. Additional Duties. The officers of the Commission shall perform such other duties and functions as may be required by the Commission from time to time, by the Bylaws or rules and regulations of Commission, by law, or by special exigencies which shall later be ratified by the Commission.

### **ATTACHMENT**

None



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER:

**MEETING DATE:** December 14, 2023

6

PREPARED BY: Kate Morgan, Airport Executive Assistant

### <u>TITLE</u>

Airport Commission Meeting Dates for 2024

### **RECOMMENDED AIRPORT COMMISSION ACTION**

Approve the recommended 2024 Commission Meeting Schedule

### **BUDGET IMPACT**

Neutral

### **SUMMARY**

The general meeting schedule format remains the same as the previous year with monthly meetings held on the third Thursday of each month. The proposed meeting schedule for 2024 considers the holidays, conferences, and other events which could present scheduling conflicts for City Officials. The month of June is the only meeting time with an alternate Thursday recommended to avoid scheduling conflicts. The PDSC meetings would remain on a monthly schedule. Special meetings may be called on a case-by-case basis for high priority approvals and other business as needed.

### **ATTACHMENT**

Draft 2024 Monthly Airport Commission Meeting Schedule



### Northern Colorado Regional Airport Commission Meeting Schedule for 2024

### DRAFT

Meetings are regularly scheduled on the third Thursday of every month:

- January 18<sup>th</sup>
- February 15<sup>th</sup>
- March 21<sup>st</sup>
- April 18<sup>th</sup>
- May 16<sup>th</sup>
- June 20<sup>th</sup> June 13<sup>th</sup> or 27<sup>th</sup> recommended
- July 18<sup>th</sup>
- August 15<sup>th</sup>
- September 19<sup>th</sup>
- October 17<sup>th</sup>
- November 21<sup>st</sup>
- December 19<sup>th</sup>

Meetings are held in the Airport Administrative Office located at 4900 Earhart Road in Loveland, Colorado. All meetings shall commence at 3:30 p.m. and end by 5:00 p.m.

City holidays, conferences, and other events to be considered when determining the schedule include:

Martin Luther King, Jr. holiday January 15<sup>th</sup> National League of Cities Conference March 11<sup>th</sup>-13<sup>th</sup> PSD Spring Break March 11<sup>th</sup>-15<sup>th</sup> TSD Spring Break March 18<sup>th</sup>-22<sup>nd</sup> Colorado Municipal League Annual Conference June 18<sup>th</sup>-21<sup>st</sup> Juneteenth holiday Wednesday, June 19<sup>th</sup> Christmas holiday Wednesday, December 25<sup>th</sup>



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

### ITEM NUMBER:

**MEETING DATE:** December 14, 2023

7

PREPARED BY: Laurie Wilson, Senior Assistant City Attorney

### <u>TITLE</u>

Commission Roles and Responsibilities Training

### **RECOMMENDED AIRPORT COMMISSION ACTION**

Informational

### **BUDGET IMPACT**

Neutral

### **SUMMARY**

This is an informational training that is conducted annually for all boards and commissions serving the Cities, with some Commission-specific information.

### **ATTACHMENT**

Commission Roles and Responsibilities Presentation



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER:8MEETING DATE:December 19, 2023PREPARED BY:Francis Robbins, Operations & Maintenance Manager

### <u>TITLE</u>

Federal Contract Tower Operating Agreement (TOA)

### **RECOMMENDED AIRPORT COMMISSION ACTION**

A motion to recommend Fort Collins and Loveland City Councils approve the Federal Contract Tower Operations Agreement (TOA) in substantially the form attached here too "Exhibit A".

### **BUDGET IMPACT**

Neutral – The FCT Agreement has no direct financial encumbrance to the Airport funds. Providing and maintaining the required facilities and equipment will have costs entered into separately entered into. The Airport budget is sufficient to cover the estimated \$170,000 annual cost for providing and maintaining the Mobile Tower facility and equipment.

With respect to the Cities' commitment under the FCT Agreement to design and construct a brick-and-mortar tower, those costs are not currently known. Airport staff are working to quantify those costs. The earliest financial impact will be the tower siting process, and Airport staff anticipate that will involve an agreement with the FAA that will include some financial reimbursement to the Airport. The FAA has also communicated to Airport staff that grant funds may be available for the design and construction of a brick-and-mortar tower. Airport staff also currently intend to continue to explore a remote tower option, and if it is feasible, that will result in substantially lower costs for design and construction. Airport staff anticipates knowing whether a remote tower is feasible approximately two years after the execution of the FCT Agreement.

### **SUMMARY**

The purpose of this item is for the Commission to recommend the City of Fort Collins and City of Loveland execute an agreement with the Federal Aviation Administration (FAA) for the Northern Colorado Regional Airport (Airport) to enter the FAA Contract Tower (FCT) Program. The FCT Program will result in the Airport continuing to receive federally funded Air Traffic Control services (ATC Services). ATC Services are currently funded through FAA's Next Gen office as part of the Remote Tower Project. However, that funding will be ending December 31, 2023,

and entering the FCT Program will provide a continuation of ATC Services paid for by FAA. Acceptance in the Contract Tower Program ensures ATC Services for a period of 60 months while a permanent facility is constructed.

### <u>HISTORY</u>

The FAA, the CDOT Division of Aeronautics, the Airport, and Searidge Technologies entered into a collaborative effort in the Colorado Remote Tower Project which began construction in August 2018 and construction was completed in November 2019. The project goal was to make ATC Services available to a wider number of airports by leveraging technology to reduce infrastructure costs of a traditional ATC Tower. Searidge Technologies was the second of three companies in the United States to approach the FAA with a system to be evaluated for approval for use in the National Airspace System. CDOT contributed \$8 million to the Remote Tower Pilot Project and FNL contributed use of an existing building for use by the project. No Airport funds were used in the construction or testing of the project.

In March of 2020, as part of the project, the Mobile Air Traffic Control Tower began operations in preparation for structured testing of the remote tower. Pandemic-era travel and operational policies resulted in significant delays to project testing that began in 2022. As is common with developing technologies, system design specifications were changed by the FAA after the project started, including changing redundancy and visibility requirements in 2022. The changes applied retroactively to the system proposed by Searidge in 2018. The FAA then issued a stop work order on the project until Searidge addressed the changed standards.

In October 2023, Searidge withdrew from the Remote Tower Project. The FAA funding for the Remote Tower Pilot Project expires December 31, 2023, leaving a funding question for continued ATC Services at the Airport. Because FNL has had an ATC solution in place for 34 months as a result of the Project and because the National Airspace System would be adversely affected without a transitional measure, the FAA established a pathway for FNL to join the FCT Program through an exception to FAA Joint Order 7210.78. Typically, an airport must construct a conventional ATC facility prior to the airport applying to be a federally-funded ATC service. The exception will allow the Airport to join the FCT Program before building a permanent facility and continued use of the existing mobile tower infrastructure for a period of up to 5 years while a permanent ATC facility is developed. To take advantage of this exception, the Cities and the FAA must execute a FAA Contract Tower Operating Agreement (FCT Agreement)

Acceptance into the FCT Program results in funding from FAA's Air Traffic Office and provides an avenue for continued funding of ATC Services in the near term and also once a permanent facility is established. Currently there are 262 airports in the FCT Program including three in Colorado: Colorado Air and Space Port, Eagle County Regional Airport, and Grand Junction Regional Airport. Operations at the Airport during the last 34 months have identified the standard staffing level of 5 full-time controllers is optimal for the established ATC operating hours of 10 hours per day, 7 days per week. The value of continued funding through the FCT Program supplying 5 full-time controllers is estimated at \$600,000 annually. In the FCT Program, the Airport is required to provide certain equipment and facility maintenance which is not financially outlined in this agreement and will be executed separately. Controller equipment maintained by the Airport will include: Voice Switch communication, Controller headsets, VHF aviation radios for Primary and Secondary/backup use, Digital voice recorder, telephone with long distance, high speed internet communication, Alert System communication, and Limited Aviation Weather Reporting Station. It is intended for the Airport's ATC Services to use mainly existing equipment from the Mobile Tower and the Remote Tower Project. The cost of maintenance, repair, or replacement due to equipment failure will be the Airport's responsibility. The cost of maintaining the existing facilities is estimated at \$170,000 annually with most of the expense (\$136,332) coming from a rental and maintenance agreement with Aegis for the existing Mobile Tower facility, as outlined below:

Estimated Cost of Maintenance and Upkeep*					
Year	Monthly Rate	Annual Rate	Total		
2024	\$11,361	\$136,332	\$136,332		
2025	\$11,758	\$141,096	\$277,428		
2026	\$12,169	\$146,028	\$423,456		
2027	\$12,594	\$151,128	\$574,584		
2028	\$13,035	\$156,420	\$731,004		
Additional Costs					
Site Survey	Setup	Training	Teardown		
Complete	Complete	Complete	\$22,000		

\*Cost negotiated with Serco starting 1/1/2024 and is programmed with an annual inflation rate of 3.5%.

In return for the continuing funding for ATC Services, the FCT Agreement requires the Airport to complete all necessary actions to construct a brick-and-mortar ATC tower along certain milestones starting upon the effective date of the Agreement:

- Complete the FAA ATC Tower Siting Process within two years.
- Commence construction of the permanent tower within thirty months.
- Complete construction of the permanent tower within five years.

Airport staff are developing and quantifying future capital projects for permanent ATC facilities. Digital/remote tower options may become available prior to the construction deadline outlined in the FCT Agreement. Both traditional and digital tower solutions require a new siting study through the FAA Virtual Immersive Siting Tower Assessment (VISTA) program, and Airport staff are developing a scope of work for that siting study. It should be noted, the FCT Agreement may be terminated by the parties at any time with ninety days prior written notice.

### **ATTACHMENT**

Presentation Exhibit A - FAA Contract Tower Operations Agreement (TOA) Memorandum of Decision Oct 30, 2023



# Item 8-FAA Contract Tower Operating Agreement

Northern Colorado Regional Airport Air Traffic Control Agreement Presented December 14, 2023

# Air Traffic Safety Need



- X Air Traffic Control Services Established March 2020
- ℅ Flight separation needed for over 100,000 Flight Operations annually
- Remote Tower Pilot Program funding ends December 31, 2023
- Solution Federal Contract Tower Program with FAA provides funding for controllers to continue service starting January 1, 2024

### Path Established by Tower Operation Agreement





57



# \$600,000

**Federally Funded Controlers** 



Annual Maintenance Cost by Airport

# 60 months

Transition to permanent solution

### **Recommended Action**



- Adopt the Resolution and enter the Federal Contract Tower Program
- Signal Airport Commission to move forward with the Tower Siting Study.

### FAA CONTRACT TOWER OPERATIONS AGREEMENT (TOA) BETWEEN

### FEDERAL AVIATION ADMINISTRATION (FAA)

### AND

### NORTHERN COLORADO REGIONAL AIRPORT, CO

### I. PARTIES

This FAA Contract Tower Operations Agreement (TOA) (hereinafter "Agreement") is hereby made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between the Federal Aviation Administration ("FAA") and the City of Loveland and the City of Fort Collins (FNL)(jointly, "Airport Sponsor") (collectively known as the "Parties").

### II. SCOPE

The purpose of this Memorandum of Understanding (MOU) between the FAA and the Airport Sponsor is to set forth the terms under which Northern Colorado Regional Airport (FNL) will participate in the FAA Contract Tower (FCT) program temporarily using a Mobile Airport Traffic Control Tower (MATCT). This Agreement replaces and supersedes any prior Tower Operations Agreement signed by the parties. This Agreement is not intended to reduce or limit the Airport's rights under the FCT Program except as expressly set forth herein regarding the use of the MATCT.

### **III. ROLES AND RESPONSIBILITIES OF THE PARTIES**

### A. Roles and responsibilities of the FAA.

The FAA shall fund air traffic control services at the Airport using the MATCT, by way of a contractual agreement between the FAA and an air traffic control (ATC) services provider of the FAA's choice, in accordance with standards established by the FAA until the new brick and mortar tower is commissioned, subject to the availability of funds.

The MATCT hours of operation will be 0800-1800 Local. The FAA reserves the right to adjust those hours in accordance with applicable FAA standards, regulations, and policy.

The ATC services provider will collect hourly and daily traffic count data during tower operating hours.

The FAA will maintain all FAA-owned equipment installed in MATCT and at FNL.

The FAA will conduct annual occupational safety and health inspections, for any FCT that is an FAA employee's duty station.

1

The FAA will conduct periodic security inspections based upon the criteria identified in FAA Order 1600.69C, as may be amended. Relevant portions of the Order will be provided to Airport Sponsors. (A Signed Non-Disclosure Agreement (NDA) will be required to receive a copy of the Order.)

### B. Roles and responsibilities of the Airport Sponsor.

The Airport Sponsor shall provide and maintain, at no expense to the FAA, a temporary MATCT that meets all applicable Federal, state, and local codes, standards and regulations.

The Airport Sponsor shall provide, maintain, and replace for the temporary MATCT, at no expense to the FAA, all non-FAA-owned tower equipment required by the Minimum Equipment and Facilities List (MEL) attached hereto as Appendix A (*FAA Order JO 7210.78*), with the following modification to Section 1 (*Communications Equipment*) paragraph (g):

(g) Telecommunication requirements to sustain high speed internet communication, to include the following:

1) FTI Mission Support connection and Router;

2) Local Area Network consisting of a network switch, an Uninterruptible Power Supply (UPS), a rack with patch panel, and network cabling to the wall jacks.

is replaced by:

(g) Telecommunication requirements to sustain high speed internet communication available to the controller workforce in (locations to be determined).

*Note*: This adjustment to the MEL is only applicable to the MATCT, and the upcoming brick-and-mortar tower will be required to fulfill the requirements of FAA Order JO 7210.78.

The Airport Sponsor shall provide and continually maintain all utilities and services, including but not limited to: heating, air conditioning, electrical, water, gas and sewer, to the temporary MATCT.

The Airport Sponsor shall maintain janitorial services (to include washing tower cab windows and shades, interior and exterior, when necessary) at no expense to the FAA for the temporary MATCT.

The Airport Sponsor shall be responsible for the proper and continued

functioning of all equipment that the FAA determines is necessary for temporary MATCT operations, including that which cannot be placed in operation or otherwise controlled from the MATCT building or that is not otherwise within the control of the FAA, its agents, representatives, or contractors. Examples include, but are not limited to airport lighting, windsock, obstruction lights, rotating beacon, etc.

The Airport Sponsor is responsible for establishing and maintaining security and controlled access to the temporary MATCT in accordance with FAA Order 1600.69C, as may be amended. Relevant portions of the Order will be provided to the Airport Sponsor. (A Signed NDA will be required to receive a copy of the Order).

The Airport Sponsor agrees to enter into a Letter of Agreement (LOA) with the ATC service provider's local representative specifically for the purpose of providing an airport point of contact and procedures to follow to ensure a timely response to requests concerning equipment, security or building problems.

In accordance with FAA Order JO 7210.3, as revised, other Letters of Agreement may be necessary to comply with other requirements such as airport emergency service, control of vehicular traffic on airport movement areas, operation of airport lighting, local procedures and reporting airport conditions. However, the terms and conditions set forth in this Agreement or the FCT contract cannot be waived or superseded by such local agreements.

The Airport Sponsor shall, at no cost to the FAA, complete all necessary actions to construct a brick-and-mortar Airport Traffic Control Tower (ATCT) that meets FAA requirements in FAA Order 7210.78. Except as agreed between the parties or as otherwise permitted under the FCT Program, the Airport Sponsor must meet the following milestones to remain in the FCT program:

- Complete the FAA Airport Traffic Control Tower Siting Process for the permanent tower no later than two years from the date of signature of this Agreement.
- Commence construction of the permanent tower no later than 30 months from the date of signature of this Agreement.
- Complete construction of the brick-and-mortar tower no later than 5 years from the date of signature of this Agreement.

The Airport Sponsor shall sign a new/modified Tower Operations Agreement for the permanent brick-and-mortar ATCT no later than 60 days before the anticipated commissioning of the permanent tower.

### **IV. BENEFIT/COST RATIOS CONSIDERATION**

Statute dictates how often and under what conditions FAA recalculates benefit/cost ratios to determine the percentage of funds for which the FAA and the airport are responsible. The FAA currently provides full funding for sites with a benefit/cost ratio of 1.0 or greater. Fully funded sites at which the FAA has determined that the benefit/cost ratio decreases to less than 1.0 will be offered the opportunity to participate in the FCT Cost Share Program.

### **V. SUPPLEMENTAL HOURS**

If the Airport Sponsor requests MATCT services outside of FAA approved tower hours of operation, the provision of such additional services shall be at the expense of the Airport Sponsor, unless otherwise agreed to. These supplemental hours of operation may be achieved through an agreement with the air traffic control services provider, supplemental agreement with the FAA, or by other authorized means.

### VI. POINTS OF CONTACT

### Airport Sponsor

David Ruppel Airport Director Northern Colorado Regional Airport (970) 962-2852

### FAA Implementation Manager

Dan Sherren Terminal Program Implementation Team, AJV-W37 Western Service Area 206 231-2765

### FAA Program Manager

Lisa Bush-Caudle FAA Contract Tower (FCT), Program Manager Program Management Office, Enterprise Services, AJM-3 800 Independence Ave., SW, Washington, DC 20591 (202) 267-0849

### **VII. CHANGES AND/OR MODIFICATIONS**

Changes and/or modifications to this Agreement shall be in writing and signed by both parties. The modification shall cite the subject Agreement and shall state the exact nature of the modification. No oral statement by any person shall be interpreted as modifying or otherwise affecting the terms of this Agreement.

### **VIII. TERMINATION**

In addition to any other termination rights provided by this Agreement, either party may terminate this Agreement at any time prior to its expiration date, with or without cause, and without incurring any liability or obligation to the terminated party by giving the other party at least Ninety (90) days prior written notice of termination. Upon receipt of a notice of termination, the receiving party shall take immediate steps to stop the accrual of any additional obligations, which might require payment. Termination of this Agreement is without prejudice to the airport sponsor's ability to continue to construct a brick-and-mortar tower as part of the FCT Program if it is otherwise in compliance with its obligations under the FCT Program.

### IX. TERM OF THE AGREEMENT

This Agreement is applicable for one year from the date of signature and may be renewed annually based on the FAA's assessment of Airport Sponsor's progress in building a permanent brick-and-mortar ATCT and meeting the milestones described in Section III. B above, unless terminated by either of the parties in writing, as provided herein.

### X. DISPUTES

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any disagreement through good faith negotiations, the Director of Operations- Headquarters (AJT-2) will resolve the dispute after direct consultation with Airport Director. The decision of the Director of Operations-Headquarters is not subject to further administrative review and, to the extent permitted by law, is final and binding.

### **XI. INSURANCE**

The Airport Sponsor shall arrange by insurance or otherwise for the full protection of the Airport Sponsor from and against all liability to third parties arising out of, or related to, the performance of this Agreement to the extent permitted by law. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the notices, requirements, immunities, rights, benefits, protections, limitations of liability, and other provisions of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, et seq., and under any other applicable law.

### **XII. LIABILITY**

The FAA assumes no liability under this Agreement for any losses arising out of any action or inaction by the Airport Sponsor, its employees or contractors, or any third party acting on its behalf. The Airport Sponsor agrees to hold the FAA harmless against any claim by third persons for injury, death, or property damage arising out of or in connection with the Airport Sponsor's performance under this Agreement.

### XIII. LEGAL AUTHORITY

This "other transaction" MOU is entered into under the authority of 49 U.S.C. §§ 106 (f)(2)(A) and 106(I) and (m), which authorizes agreements and other transactions on such terms and conditions as the Administrator determines necessary. This MOU is not a Memorandum of Agreement, procurement contract, grant or cooperative agreement. Nothing in this Agreement shall be construed as incorporating by reference or implication any provision of Federal acquisition law or regulation.

### **XIV. CIVIL RIGHTS ACT**

The Airport Sponsor shall comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in federally assisted programs and, if requested, provide a certification to that effect.

### **XV. PROTECTION OF INFORMATION**

The parties agree that they shall take appropriate measures to protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this MOU.

### **XVI. FUNDING**

No funds are obligated under this MOU. Each party shall bear the full cost it incurs in performing, managing, and administering its responsibilities under this MOU.

### XVII. CONSTRUCTION

Parties agree to exercise good faith in achieving the goals of this MOU; this means that the Government will adopt and perform the above delineated roles and responsibilities and will provide MATCT services to the above designated Airport Sponsor at the designated location. The Airport Sponsor also agrees to adopt and perform the above delineated roles and responsibilities. Neither party is authorized or empowered to act on behalf of the other with regard to any matter, and neither party shall be bound by the acts or conduct of the other in connection with any activity under this MOU. This provision shall survive termination of this MOU. The undersigned Agreement holder affirms that this MOU is entered knowingly and voluntarily.

The FAA reserves the right to withdraw the MATCT services from the Airport Sponsor if it does not comply with the terms of this agreement.

AGREED:

<u> Airport Sponsor – City of Loveland</u>	Federal Aviation Administration
BY:	BY:
TITLE:	TITLE:
DATE:	DATE:
ATTEST:	Federal Aviation Administration
City Clerk	ВҮ:
APPROVED AS TO FORM:	
Senior Assistant City Attorney	DATE:
Airport Sponsor – City of Fort Collins	
<u>BY:</u>	
TITLE:	
DATE:	
ATTEST:	
City Clerk	

Assistant City Attorney



Federal Aviation Administration

### **Memorandum of Decision**

Date: October 30, 2023

From: Malcolm Andrews, Director, Enterprise Services, AJM-3

Jeffrey Szczygielski, Director, Operational Policy and Implementation, AJT-2

Subject: Remote Tower Pilot Program Mobile Tower Exception for the FCT Program

The Federal Aviation Administration (FAA) Contract Tower (FCT) Program was established in 1982 to allow the Agency to contract third-party operators for qualified airport traffic control towers (ATCT). There are three phases for third-party operators in the FCT Program: Applicant, Candidate, and Participant. FAA JO 7210.78 requires an FCT candidate to complete construction of an ATCT before becoming an FCT participant, entitling them to funding for air traffic services.

Congress directed the FAA to establish a Remote Tower (RT) Pilot program to test remote tower systems. Remote tower systems consist of one or more types of optical sensor and displays to provide air traffic services. The FAA selected two sites to participate in this program: Leesburg Executive Airport (JYO) and Northern Colorado Regional Airport (FNL). Prior to the RT Pilot program, these airports did not provide air traffic services. The RT Pilot program will conclude for those specific locations by December 2023 and air traffic services will no longer be provided through the RT Pilot program.

On April 24, 2023, the FAA determined the potential for administrative burdens and operational impacts at Leesburg and Northern Colorado warranted an exception to FAA JO 7210.78 requirements to complete construction and certification of the ATCT. Without a transitional period from RT Pilot program to FAA Contract Tower (FCT) Program, there would be significant impacts to the current levels of service. Therefore, the FAA will allow a temporary exception to sites that participated in the RT Pilot Program, when determined it is in the best interest of the agency.

The FAA may grant an exception for a site to allow the use of a mobile tower if it was currently providing air traffic control services without a permanent tower for a period not to exceed five years, with the expectation that a permanent tower will be established by that time. If the site does not construct the permanent tower by the end of the five years, it must reapply to the program. MALCOLM ANDREWS Date: 2023.10.31 12:42:43 -04'00'

Malcolm Andrews Director Enterprise Services, AJM-3 JEFFREY S SZCZYGIELSKI 5ZCZYGIELSKI Date: 2023.11.02 12:27:40 -04'00'

Jeffrey Szczygielski Director Operational Policy and Implementation, AJT-2



### NORTHERN COLORADO REGIONAL AIRPORT 4900 Earhart Rd • Loveland, Colorado 80538 (970) 962-2850 • FAX (970) 962-2855 • TDD (970) 962-2620

ITEM NUMBER:9MEETING DATE:December 14, 2023PREPARED BY:Aaron Ehle, Airport Planning & Development Specialist<br/>Scott Schorling, Loveland Business Development Project Manager

### <u>TITLE</u>

Airport Land Use & Leasing Policy Strategy

### RECOMMENDED AIRPORT COMMISSION ACTION

Provide feedback to staff on recommended strategy

### BUDGET IMPACT

Unknown

### **SUMMARY**

Northern Colorado Regional Airport has recently seen significant hangar development. This has led to a shortage of shovel-ready property for new development. There is considerable demand for additional aeronautical development, but funding for new infrastructure to support private development is limited. As competing interests have emerged, deficiencies in the existing development review process have been identified. The Airport Commission has tasked staff with identifying ways to improve the Airport's land use strategy and leasing policy to address these challenges.

Airport and City staff have created a presentation to share information about existing plans and policies, issues that need to be addressed, and recommendations for marketing Airport property and enhancing the development review process.

Links to existing guiding documents related to development can be accessed at: <u>https://www.flynoco.com/airport-development/</u>

### **ATTACHMENTS**

Airport Land Use & Leasing Policy Presentation FNL Development Guide

# **Airport Land Use & Leasing Policy Strategy**



FNL Airport Commission December 14, 2023



## Agenda

- Airport Land Map
- Guiding Documents
- Current Leasing
  Process
- Assessment and Recommendations
- Next Steps
- Questions and Feedback





# **Airport Land Map**

- Approximately 180 Acres of developable land
- Little to no "shovel ready" property
- Primary financing mechanism for Airport infrastructure is through FAA grants, however these funds cannot be used for private business enterprise.
- We need to service public and private development interests and inquiries.

Airport Boundary Aircraft Movement Reserve


## Guiding Documents – Airport Master Plan



- Adopted in 2020
- 2-year planning process in excess of \$500k
- Comprehensive, long-range study of every physical aspect of the Airport
- Roadmap for orderly development of future Airport facilities
- Elements
  - Inventory of Existing Conditions
  - Aviation Activity Forecasts
  - Future Land Use Demand and Planning Considerations
  - Utilities/Environment
  - Conceptual Development Plan
  - Development Program and Needs Assessment
  - Financial Analysis

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## **Guiding Documents – Airport Layout Plan**



- Part of the Master Plan
- FAA Driven/FAA Funding
- Critical planning tool that depicts both existing facilities and planned development
- Land use and airspace considerations
- Broad land use categories allow for flexibility while preserving land for aeronautical demand

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## **Other Existing Plans and Policies**

#### Airport

- Design Standards
  - Adopted by the Airport Commission in 2020
- FAA rules and regulations
- Airport rules and regulations
- Strategic Plan
- Minimum Standards

#### City of Loveland

- Zoning and Land Use Policy
  - Entire Airport is in "Developing Industrial" zone, which allows for a wide variety of land uses

ER

R1

R2

R3

- Building and Fire Code
- Airport Influence Area



### **Current Development Review Process**

Updated 10/5/2020

#	Item Description	Responsibility	Action	
1	Discuss concept with Airport staff	Airport/Applicant	Identify potential locations, building size and use(s), type o aircraft to be housed, major utilities required, and special requirements such as parking, access, etc.	
2	Provide potential locations with building diagrams	Airport	Airport staff will work with developer on site location diagrams in accordance with the applicant's needs. Site location and dimensions will depend upon a variety of considerations, including alignment with Airport Land Use and Design Standards, Airport Master Plan, Utility Plan, FAA development standards, Airport Minimum Standards, existing infrastructure, and City of Loveland adopted codes.	
3	Identify preferred building location	Applicant	Identify the most suitable location for the development	
4	Develop project proposal	Applicant/Airport	Work with Airport staff to determine infrastructure needs, setbacks, construction type, layout, landscaping, etc. Applicant will prepare preliminary site plan, building elevations, and landscaping plan diagrams in accordance with Airport Design Standards.	
5	Airport staff review	Applicant/Airport	Present project proposal details to Airport staff for feedback.	
6	Enter into an optional intent to lease agreement	Applicant/Airport	Enter into an agreement, and provide payment of \$1,000 or \$1,000 per acre (whichever is greater) to secure lot for up to three months to allow applicant to progress through steps 7- 14. Deposit will be applied toward the land lease or the cost of the survey if land is not leased.	
7	Schedule building consultation (simple projects) or concept review (complex projects) with City of Loveland	Applicant/Airport	Airport will work with applicant to provide information to City of Loveland staff and schedule a meeting to discuss project details. These meetings are not required bat highly recommended to avoid potential pitfalls.	
8	Attend building consultation or concept review meeting	Applicant/Airport/ Loveland Development Review Team	Receive input from City of Loveland staff regarding permit preparation. Obtain information on building/fire code requirements, utilities, transportation, stormwater, ele. Determine if architect and/or site plan review will be required.	
9	Prepare project proposal for PDSC review	Applicant	Incorporate feedback from City/Airport staff to refine project proposal. (See Note A for submittal requirements)	
10	Planning & Development Subcommittee (PDSC) Review	Applicant/Airport/ PDSC	Present project proposal details to the PDSC for feedback and potential recommendation to the Airport Commission.	
11	Perform utility locate	Applicant	Applicant will schedule utility locate; Airport will provide necessary support for access to site.	
12	Perform basic site survey	arm basic site survey Airport Once the lot area is confirmed by the app will order and pay for a basic site survey be leased (Note: The Airport will only pa per lot).		
13 □	Finalize project details and prepare for Airport Commission review	Applicant	Incorporate feedback from PDSC to finalize project proposal. (See Note A for submittal requirements)	
14	Sign land lease	Applicant/Airport	The applicant will sign a land lease with the Airport based on the area defined by the site survey.	
15 □	Airport Commission review and lease execution	Applicant/Airport/ Airport Commission	Present site plan, clevations, and landscaping plan for Airport Commission review and feedback. If project is approved by the Commission, the lease will be executed.	

Northern Colorado Regional Airport Development Guide

- Website advertises all available land for development
- Airport staff uses a 20-step development guide which outlines the process for review and recommendation of development proposals to the Airport Commission.
  - Provides developers with transparency and information as to the development processes
  - Provides understanding of responsibilities and expectations
- Standard Lease agreement terms are approved by both Cities
  - Leases that deviate substantially must be approved by both City Councils

### Land Lease Rates

- Determined by rates and fees study conducted every 5 years
  - Existing rates and fees are compared to regional airports that are similar in size and amenities and adjusted accordingly
  - Last completed in 2021
  - Adjusted for inflation every year
- Unimproved Property \$0.327 per square foot
  - No or limited access to utilities, taxiways, roads, etc.
- Improved Property \$0.464 per square foot
  - Adequate access to utilities, taxiways, roads, etc.
- Lease Discounts & Incentives:
  - Lower lease rates
  - Scaled/phased lease rates
  - Extended lease lengths
    - Standard lease length is 40 years. Maximum is 50 years.



Factors that are considered

- Large footprint leases (over 1 acre)
- Exceptional levels of private investment
- Catalyst projects that will likely attract additional activity/development
- Construction of public improvements by developer
- Auxiliary revenues from businesses

### **Assessment – Current Lease/Development Strategy**

- FNL has over 180+ acres of developable land suitable for a mix of aviation and business interests.
- Historically, private development projects at the airport have occurred through unsolicited proposals to airport staff.
  - Staff does not actively market sites for lease
- As development-friendly, high exposure sites become scarce, competitive interests have emerged.
- A clear policy and improved leasing process has been requested by stakeholders and the Commission.
- The Airport desires to attract the best development partners in the industry while managing existing relationships and assets.
  - Presents challenges for staff to balance ongoing concerns with new negotiations
- Currently there are limited funds to deliver new shovel-ready sites for private investment

# **Comparative Analysis – Front Range Airports**



4-person in-house team dedicated to the development of adjacent land and includes consulting firms CBRE, commercial real estate broker, the architectural firms of Sasaki, BrightView Design Group, Shears Adkins Rockmore Architects (SAR), and Livable Cities, the engineering firms of Merrick, Stantec, and Matrix and the brand marketing firm Launch.

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Air Service Development Manager, Director of Aviation, Advertising Specialist, Senior Airport Properties Specialist, RFP/ Bidnet process



Business Support Specialist, Airport Planning Office, 53-page Aviation and Non-aviation Development guide.

### **Recommended Airport Land Use & Lease Strategy**

- Contract with an aviation real estate specialist to exclusively market opportunities in a public campaign for a reasonable period (ie. 3 years, subject to annual renewal).
- Real Estate Advisor Scope of Services to include:
  - Real estate marketing and advisory services
  - Recommendations to PDSC and Commission on amendments to plans & policies (land-use, lease terms, incentives)
  - Create an Airport Development and Leasing Website and document portal to increase exposure of the Airport to current stakeholders and future partners.
  - Handle all inquiries, initial vetting and recommendations, manage the transaction process.
  - Publicly promote opportunities to local, national, and international contact lists
  - Coordinate with Commercial Air Service Consultant on strategy/branding.
  - Work with the PDSC to present offers and recommendations to the Commission.
- This is a similar arrangement to what the City of Loveland uses to market and sell City-owned property.

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#### **Ancillary Benefits**

- Replaces passive/reactive strategy with a targeted proactive strategy
- Cross marketing of new terminal and services to the aviation and business marketplace
- Low up-front costs / Compensation through the deal (ie. traditional commission).
- Fills a gap in resources (Staff time/\$) to market and create better branding for the airport
- Brings expertise and additional credibility to the leasing process
- Provides a buffer between potential bidders, current stakeholders, and staff
- Does not change the hierarchy of the approval process Broker  $\rightarrow$  PDSC  $\rightarrow$  Commission  $\rightarrow$ City Councils
  - Can adapt to governance study recommendation, as necessary.

## **Airport Real Estate Service Providers**













#### **Next Steps**

- Commission feedback on Leasing Strategy
- Formalize RFP Criteria
  - Real Estate Advisor Scope of Services
  - Compensation
  - Use Site "C" as the RFP marketing scenario/ priority project for respondents
- Conduct RFP Process and Select Broker
- Execute Marketing Plan with priority project for replacement general aviation hangars.





# **QUESTIONS and**

## **FEEDBACK?**



#### Northern Colorado Regional Airport Development Guide



#### NORTHERN COLORADO REGIONAL AIRPORT

#### The following outline provides a general guide of the Airport development process:

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12 □	Perform basic site survey	Airport	Once the lot area is confirmed by the applicant, the Airport will order and pay for a basic site survey of the lot area to be leased (Note: The Airport will only pay for one survey per lot).
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#### Northern Colorado Regional Airport Development Guide

#### Updated 10/5/2020

16a If no site development plan (SDP)		Applicant	Proceed to 16 - Building permit		
	review required			buildings multiple uses or large buildings)	
16b	If site development plan (SDP) review required		Applicant	Prepare site plan in accordance with City's site plan review process	
17 □	Building permit		Applicant	Applicant will prepare building permit submittal in accordance with City of Loveland Permit requirements. Airport may provide limited support as necessary.	
18 □	Pre-construction meeting with Airport Staff		Applicant/Airport	Applicant and/or contractors must obtain Airport access badge(s). Site access and security plan must be approved by the Airport Security Coordinator. Discuss project schedule, temporary fencing, erosion control, impact to Airport operations, etc., with staff.	
19 □	Begin Construction		Applicant	Basic site work, including excavation, may be performed with the consent of the Airport in advance of building permit issuance.	
20 □	Airport Inspection and Approval		Airport	Airport Staff will inspect the project site and all improvements to confirm compliance with Airport Design Standards. Airport approval is required prior to certificate of occupancy from the City.	
Steps Estimated		Minimum Time Required			
1-6 4 Weeks		4 Weeks			
7 – 15 6 Week		6 Weeks			
16 (Large projects only)6 Weeks		6 Weeks			
17-19 4-6 Weel		4-6 Weeks	s (assumes no major revisions)		
Total Time to Building 14-16		14-16 Weel	eeks (typical projects)		
Permit Issuance		22+ Weeks (large projects)			

#### Note A: Submittal requirements for PDSC and Airport Commission Review (must be provided at least two weeks before meeting)

*Site Plan:* Site plan drawn to scale showing existing and planned final contour grades, the location of all improvements, including structures, aprons, taxilanes, walks, patios, driveways, parking, fences and walls, utilities, and the location of all improvements that may occur in future phases. All site data and dimensions shall be included.

*Elevations:* Colored exterior elevations drawn to scale illustrating all sides of planned structure(s). Building heights to the highest point shall be included. Elevations shall include building mounted signage and descriptions of all materials to be used, including colors, textures, and shapes.

*Landscape Plan:* Landscape plan drawn to scale showing the size, type, location, and spacing of all plants and other materials, elevation changes, and irrigation systems for all unpaved areas within the leased area.

*Project Narrative:* A written description of the uses and activities associated with the planned facilities, including number and type of aircraft, frequency of aircraft operations, and business activities.