Remote Air Traffic Control Tower Project

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Colorado Remote Air Traffic Control Project
FNL Airport Introduction

• Airport facilities
  • Two runways
    • Primary 8,500’ x 100’
    • Crosswind 2,280’ x 40’
  • Commercially certified
  • FAA design category C-III

• Aircraft activity supported
  • 95,000 annual operations
    • 85,000 general aviation, piston
    • 9,000 general aviation, turbine
    • 1,000 airline, military, & other
  • 260 based aircraft; 215 hangars
FNL User Diversity

- Private General Aviation
- Flight Training Schools
- Helicopter Fleet Operators
- Corporate Flight Departments
- Wildfire Air Tankers
- Medical Transport
- Airline Activities
- Military Aircraft
ATC Need at FNL

• Northern Colorado Growth
  • Population doubled in past 30 years
  • 690,000 people live within the region

• In 2006 the Downtown Fort Collins Airport (3V5) closed
  • Private Airport located 9 miles away
  • Displaced 127 based aircraft & 4 general aviation businesses to FNL & GXY

• From 2003-2012 Allegiant Airlines operated at FNL
  • Discontinued service citing lack of ATC
ATC Need in Colorado

- 50% of commercial service airports in Colorado do not have ATC
  - Alamosa, Cortez, Durango, Gunnison, Montrose, Steamboat-Hayden, & Telluride
  - Many have seasonal service which would be ideal for part time ATC
- Colorado has and continues to experience high rates of population growth
Colorado Remote Tower
Project Milestones

2014

- Project approved by Colorado Department of Transportation Division of Aeronautics Board & initial funding

October 2015

- Northern Colorado Regional Airport announced as being selected as Colorado test site

August 2018

- Installation begins at FNL

2015

- FAA begins to work jointly on Remote Tower Development

August 2016

- FAA selects Searidge Technologies Remote Tower System

November 2019

- Preliminary system installation completed, begin optimization and initial testing
The Colorado Remote Tower System

- **Components:**
  - 31 video cameras mounted on three camera masts
  - 13 screen “video wall”
  - 3 controller workstations
    - 3 screens at each
      - 1 Touchscreen interface
      - 2 Displays for both camera and radar data
  - Electrical redundancies including generator and UPC backup systems
System Component
Airfield Locations

Runway End Masts

Crosswind Runway 6-24
Primary Runway 15-33
Center Camera Mast

NORTHERN COLORADO REGIONAL AIRPORT
System Component
Airfield Locations

- Mobile ATCT
- Remote Tower Control Facility
• Control room
  • 360 view video wall
  • 3 controller positions & camera interface panels
    • Radar
    • Radio
    • Weather information
## Colorado Remote Tower Project Timeline

<table>
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<th>March-Sept 2020</th>
<th>Q1 2021</th>
<th>TBD 2022</th>
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<td>ATC initialization &amp; controller familiarization and preliminary evaluation</td>
<td>Phase 1 data analysis and Safety Risk Management Panel</td>
<td>Additional testing phases as needed to define initial operating capabilities for certification</td>
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- **Phase 1 Testing**: Mobile Tower provides ATC services & Remote Tower is evaluated
  - *Delayed due to COVID*

- **Phase 2 Testing**: Remote Tower becomes primary ATC & mobile tower provides safety redundancies

- **Fall/Winter 2020**
- **Q2 – Q4 2021**
- **TBD 2022/2023**

- Remote Tower System Certified
Remote Tower Advantages

• Cost savings
  • 50% or more for construction
  • 75% on operation and maintenance
  • Scalable to adapt to needs
• “Off the shelf” technology
  • Easy to keep operational
  • Requires no proprietary equipment
Common Misconceptions

• Is not an automated platform for controlling aircraft traffic – or “unmanned”
• Does not replace jobs with technology
• Does not use unproven technology
• Is not more expensive than a traditional tower system
• Is not the answer to all future airport air traffic control needs
How to Follow Progress

• FNL website: www.flynoco.com
• CDOT website: www.coloradoremotetower.com
• Social media:
  • www.instagram.com/noco_airport/
  • www.facebook.com/fortloveair
  • www.twitter.com/flynoco
Facility Tour

Remote Tower Project

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