

Demonstrate Remote Autonomous Air Traffic Advisory System

Click here to see problem statement in IdeaHub: <http://ideascale.com/t/UKsrZBUbN> (Note: you must be a registered user in myACRP/IdeaHub.)

TAGS: Air Service, Airport Planning, Airside, Customer Experience, Emergency Management, General Aviation, Information Technology, Maintenance, Operations, Public Safety, Safety, Security, Sustainability

STAFF COMMENTS

The proposed research appears to be similar with that of Problem Statement 83: Small Airport Autonomous and Remote Traffic Systems (SmAARTS); it could be incorporated into that problem statement.

AVERAGE INDUSTRY RATING SUMMARY

	Committees¹	Airport Community²
Achievable	4.50	3.50
Applicable	3.50	3.60
Implementable	4.00	3.00
Understandable	3.50	3.60
OVERALL	3.88	3.60

Notes: 1. Includes TRB aviation committees and committees from ACI-NA and AAAE.

2. Includes airport employees serving on active ACRP project panels.

[USE THIS LINK TO SEE DETAILED INDUSTRY RATINGS.](#) Click on the arrow in the Problem Statements dropdown menu in the upper right and select the problem statement number.

[USE THIS LINK TO SEE DETAILED INDUSTRY COMMENTS.](#) Click on the arrow in the Problem Statements dropdown menu in the upper right and select the problem statement number.

ACRP OVERSIGHT COMMITTEE (AOC) DISPOSITION

The average AOC rating among its voting members was 1.8 on a scale of 1 to 5. There was no discussion. The problem statement was not selected for ACRP funding and will be returned to the idea collection phase of ACRP's IdeaHub.

ACRP Problem Statement: 75

Demonstrate Remote Autonomous Air Traffic Advisory System

TAGS: Air Service, Airport Planning, Airside, Customer Experience, Emergency Management, General Aviation, Information Technology, Maintenance, Operations, Public Safety, Safety, Security, Sustainability

OBJECTIVE

Demonstrate an autonomous system that meets flight requirements for small airports and commercial operators.

BACKGROUND

Brings Nextgen benefits to small airports not currently available.

APPROACH TO RESEARCH

1. Demonstrate to airport operators, pilots, state and federal authorities, advanced airport technology that provides new levels of service, including, area traffic, runway, windshear, crosswind, radio check and more.
2. Explore, integrate and test innovative sensors and technologies to enhance current capabilities.
3. Develop new methods and technologies to delivering new air traffic service levels.
4. Gather user comments and performance history to develop an assessment of the efficacy, accuracy and reliability of the system and services provided.

COST AND JUSTIFICATION

Budget estimated \$500,000 to cover cost of anticipated equipment, deployment, acquisition of additional sensors for evaluation, integration, engineering and test of additional sensors and capabilities, flight tests, data gathering, data reduction, data analysis, preparation of reports by independent parties, and travel as needed.

Air traffic services enhance safety. The challenge is exploring, developing and deploying more cost-effective solutions that can increase service levels across a broader scope of smaller airports.

This technology offers an autonomous platform to cost-effectively and safely coordinate a mix of high and low-speed, IFR and VFR aircraft, as well as remotely coordinate with distant air traffic control.

Traditional Control Towers, as well as Remote-Tower solutions, remain costly and complex to deploy, and continue to impose cost-prohibitive operating expenses beyond the budgets of most smaller airports.

A quick-to-deploy, easily sustainable autonomous alternative offers to enhance flight safety across the board, broadening both scope and availability of services, by cost-effectively providing basic tower-like service levels 24/7, practical at smaller airports anywhere and everywhere.

RELATED RESEARCH

Remote Tower proposals from SAAB Sensis (Sweden), Kongsberg (Norway), SeaRidge (Canada), and more, FAA aviation weather cameras, Alaska weather cameras, weather requirements, HEMS, ASD-X, FOD detection, Perimeter security, and more.

IDEA CREATOR

Person who first shared the idea with the IdeaHub community.

David Wartofsky

Executive (CEO / Executive Director / Airport Manager / CFO / COO / Director) potomac airfield / potomac aviation tech corp

OWNER/SUBMITTER

Person who volunteered to be responsible for developing the idea into a problem statement.

David Wartofsky

Executive (CEO / Executive Director / Airport Manager / CFO / COO / Director) potomac airfield / potomac aviation tech corp