Telecommunication at Airports—Trends and Legal Considerations

May 17, 2022

//

||





Today's Learning Objectives

- Establish contracts and policies related to new internet and cellular system uses in airports
- Assess spectrum management and establish practices to reduce interference issues





American Association of Airport Executives (AAAE)

1.0 Continuing Education Units (CEUs) are available to Accredited Airport Executives (A.A.E.)

Report your CEUs:

www.aaae.org/ceu

NATIONAL ACADEMIES

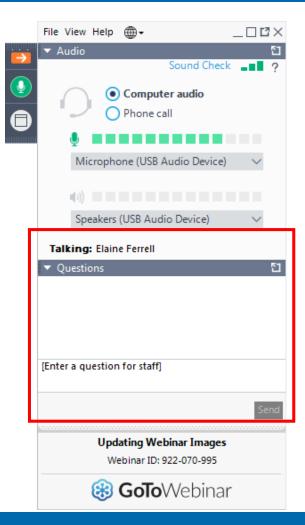
ACRP AIRPORT COOPERATIVI RESEARCH PROGRAM

Questions and Answers

Please type your questions into your webinar control panel

We will read your questions out loud, and answer as many as time allows

#TRBwebinar





NATIONAL Sciences ACADEMIES Medicine

Joseph Huber Cincinnati / Northern Kentucky International Airport (CVG)

- Chief Legal Officer at CVG
- Joined CVG in 2010 and has held various roles in contract administration, DBE/ACDBE programming, procurement, planning & development, supply chain, and legal.
- Since 2022, serves on ACRP's Panel: Legal Aspects of Airport Programs.

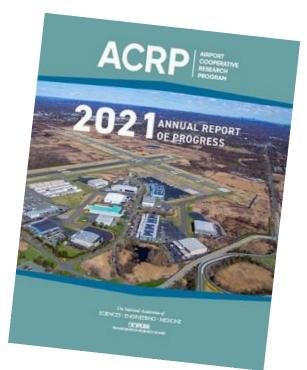




NATIONAL ACADEMIES Sciences Engineering Medicine

ACRP is an Industry–Driven Program

- Managed by TRB and sponsored by the Federal Aviation Administration (FAA).
- Seeks out the latest issues facing the airport industry.
- Conducts research to find solutions.
- Publishes and disseminates research results through free publications and webinars.



NATIONAL ACADEMIES Sciences Engineering Medicine



Today's Speakers

Sean Cusson sean.cusson@delraysolutionsllc.com Del Ray Solutions, LLC

Rendell Johnson <u>Rendel</u>I.Johnson@parsons.com Parsons





NATIONAL ACADEMIES Sciences Engineering Medicine





Presentation Overview

• Telecommunication Trends

• FCC Classification of Cellular and Internet Services

• Cellular and Internet Business Strategies

Network Management



ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM

• Demand for Bandwidth

• Business Needs and Consumer Habits

• Network Enhancements

• Industry Competition



ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM

- Demand for Bandwidth
 - Bandwidth is the amount of data a system can transmit and receive over a course of time
 - Licensed vs. unlicensed spectrum





- Business Needs and Consumer Habits
 - Fiber to the Edge
 - CBRS
 - DAS vs. Wi-Fi





- Network Enhancements
 - 5G data speeds millimeter wave
 - IT department shift to manage cloud services





- Industry Competition
 - Cellular carries desire to provide higher bandwidth
 - CBRS Landscape





FCC Service Classifications

- Telecommunications Services
- Information Services
- Commercial Mobile
- Private Mobile





Antenna Siting

- 5G Small Cell Rule Changes
 - Application and Annual Fees
 - Aesthetic Requirements
 - Shot Clock
 - Restrictions on Application Denials





Antenna Siting

• OTARD

- Cannot unreasonably delay or prevent installation, maintenance, or use of an antenna, where antenna is
 - One meter or less in diameter
 - Within exclusive use and control
 - In an area with an ownership or leasehold interest
 - Transmitting fixed wireless signals
- Matter of Continental Airlines
 - Found Massport's restrictions on Continental's use of Wi-Fi pre-empted by OTARD





Business Strategies

- Use case for each airport
- Cellular and Internet Deployment Approaches
 - Private
 - Third Party Servicer
 - Public Networks
 - Hybrid





Network Management

- Service Provider Agreements
 - Clear statement of purpose
- Service Level Agreements
 - Verifiable and enforceable
- Spectrum Management
 - Active role or hands off approach







Sean Cusson Sean.Cusson@delraysolutionsllc.com



Rendell Johnson Rendell.Johnson@parsons.com



Joseph Huber jhuber@cvgairport.com

NATIONAL ACADEMIES Sciences Engineering Medicine



Other Events for You:

June 30, 2022

ACRP Webinar: Implementing Biometric Technologies at Airports

September 19-21, 2022 Conference on Scenario Planning in Transportation

https://www.nationalacademies.org/trb/events

NATIONAL ACADEMIES

ACRP AIRPORT COOPERATIVI RESEARCH PROGRAM

NATIONAL ACADEMIES Medicine

Sciences Engineering

TREE TRANSPORTATION RESEARCH BOARD

TRB Weekly

Subscribe to the newsletter for the most recent TRB news & research:

https://bit.ly/ResubscribeTRBWeekly



Receive emails about upcoming webinars: https://mailchi.mp/nas.edu/trbwebinars

Find upcoming conferences: <u>https://www.nationalacademies.org/trb/events</u>











Get Involved with TRB

Be a Friend of a Committee <u>bit.ly/TRBcommittees</u>

- Networking opportunities
- May provide a path to Standing Committee membership

Join a Standing Committee bit.ly/TRBstandingcommittee

Work with CRP https://bit.ly/TRB-crp

Update your information www.mytrb.org

Getting involved is free!



ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM



Have you heard TRB's Transportation Explorers?

Listen on <u>our website</u> or subscribe wherever you listen to podcasts!



#TRBExplorers

NATIONAL ACADEMIES Sciences Engineering Medicine

ACRP AIRPORT COOPERATIV RESEARCH PROGRAM

Get involved with ACRP



NATIONAL ACADEMIES Sciences Engineering Medicine



Other Ways to Participate





Become an Ambassador. Ambassadors represent ACRP at events and conferences across the country!

Sponsor or become an ACRP Champion. The champion program is designed to help early- to mid-career, young professionals grow and excel within the airport industry.



Visit ACRP's Impacts on Practice webpage to submit leads on how ACRP's research is being applied at any airport.

> Visit us online: www.trb.org/ACRP





Other ACRP Research on Today's Topic

Research Report 127: <u>A Guidebook for Mitigating Disruptive WiFi Interference at</u> <u>Airports</u>

Research Report 153: <u>Guidebook for IROPS Stakeholder Communication and</u> <u>Coordination</u>

Research Report 191: <u>A Primer to Prepare for the Connected Airport and the Internet of</u> <u>Things</u>

Synthesis 62: <u>Cell Phone Lots at Airports</u>

Synthesis 73: *Emergency Communications Planning for Airports*

Synthesis 101: <u>Communication Strategies for Airport Passenger Access and Mobility</u>

Visit us online: www.trb.org/ACRP



NATIONAL Sciences Engineering Medicine

ACRP Recorded Webinars



Have you missed a past ACRP webinar that you wish you could have attended?

No worries! All ACRP webinars are recorded and posted to TRB's website for viewing at any time.

There are over 100 webinar recordings on a variety of aviation topics available to you at:

https://www.nationalacademies.org/events Select "Past Events" tab and search for "TRB Webinars".

NATIONAL ACADEMIES Sciences Engineering Medicine

