

Airside and Operational Wi-Fi

ACI Business and Information Technology

September 22, 2013



Airport Experience

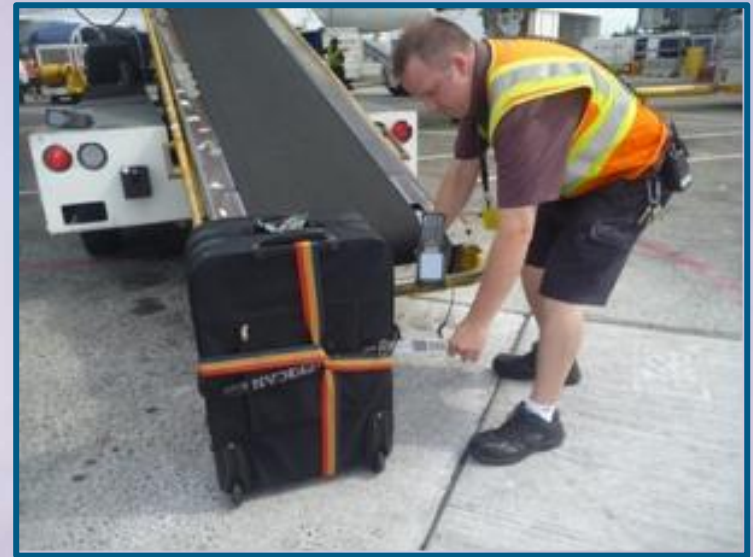
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Wireless Broadband Technology

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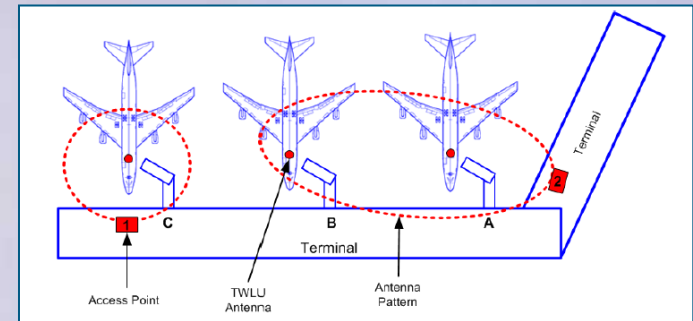
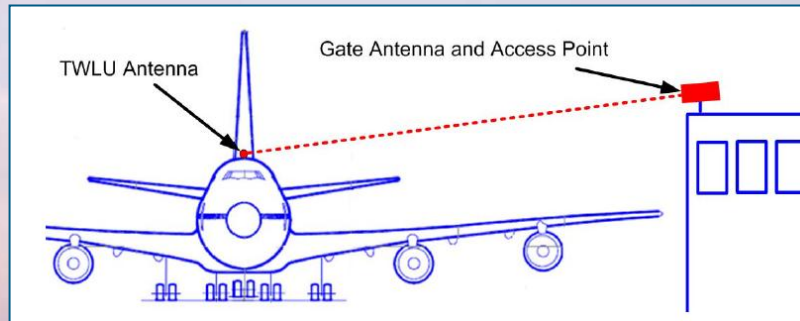
Airport Format

- What and when you installed the wireless network
- How it's being used by airlines and airport staff
- Lessons learned for airports who plan to implement the technology at their airport



What - SEA Planning Stage

- Design, install and configure a secure, expandable and high-performance 802.11 wireless network that will support airport, airline and tenant operations on the ramp and airfield.
- The “airfield wireless network” will be accessed by both handheld and vehicle-mounted mobile devices, and by new aircraft avionics provisioning systems, e.g., Boeing 747, 777, 787.
- Virtual Private Networks (VPN/VLAN) will be configured for airport, airline, and tenant operations as required



Why

- Airlines are using mobile devices to optimize their operations - baggage
- Airport staff are using vehicle and hand-held mobile devices for a variety of tasks on the airfield
- Data communication using cellular data transmission are lower speed, less secure and public (not as reliable)



Seattle-Tacoma International Airport

Connecting the region to the world – through flight



PURPOSE & STRATEGIC GOALS

Purpose

Sea-Tac International Airport promotes regional economic vitality by:

- Operating a world-class international airport
- Providing an extraordinary customer experience
- Being a model of environmental innovation for our region and our industry

Strategic Goals

1. Operate a **world-class international airport** by:

- Ensuring safe and secure operations
- Anticipating and meeting the needs of our tenants, passengers, and the region's economy
- Managing our assets to minimize the long-term total cost of ownership

2. Become one of the top ten **customer service** airports in the world by 2015 (measured by the ACI ASQ index)

3. Lead the US airport industry in **environmental innovation**, and minimize the airport's environmental impacts

4. **Reduce airline costs** (CPE) as far as possible without compromising operational and capital needs

5. **Maximize non-aeronautical net operating income** (NOI) consistent with current contracts, appropriate use of airport properties and market demand

6. Continually invest in a culture of **employee development, organizational improvement, and business agility**

7. Develop valued **community partnerships** based on mutual understanding and socially responsible practices

SEATTLE-TACOMA INTERNATIONAL AIRPORT
THE JOURNEY BEGINS HERE

Port
of Seattle

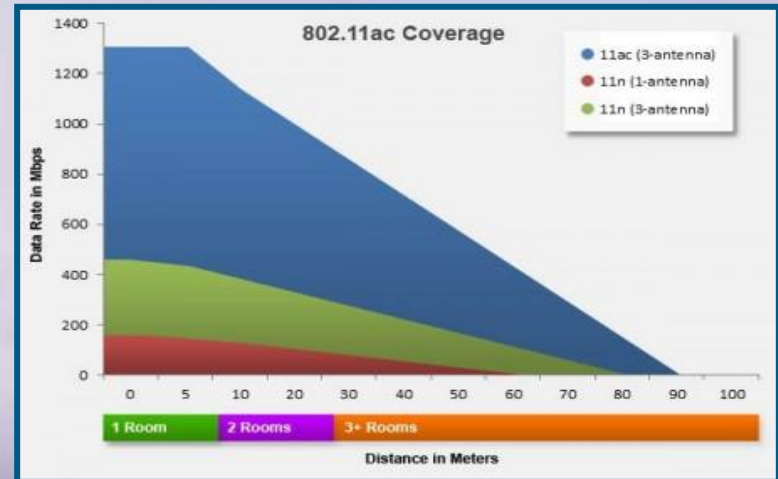
SEA Alternatives Evaluation

- Extend DAS network to provide partial or limited coverage on the airfield - requires close proximity to the existing distributed antenna system infrastructure
 - Approach relies on old technology, provides suboptimal coverage, and would not support the latest WIFI standard (802.11n)
- Allow each carrier to install their own WIFI network on airfield (at their leased gates)
 - this approach will result in redundant coverage, would not support common use at Port gates, and could result in interference from unmanaged network deployment
- Install SEA managed WIFI airfield to be used by all airline and airport operations. Recommended Solution

SEA Planned Implementation

- Network cabling infrastructure and wireless access points will be installed both above and below the wing in close proximity to jet bridges (gates) and near hardstands
- The number and location of the antennas or access points has not been determined at this time
- A network spectrum coverage study will be required to identify the optimum numbers and location of antenna access points and is included in the project scope

SEA Future



PANEL



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QUESTIONS

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THANK YOU