Item No. \_\_\_\_8d\_supp\_\_\_\_ Meeting Date: February 13, 2017

#### Safedock Upgrade and Expansion Project - C800779



## What is Safedock?

- Visual docking guidance and ramp information display.
- Guides pilot to nose stop saving fuel & reducing congestion.
- Scans ramp area for obstacles to aircraft docking.
- Docks planes following adjacency rules and can dock without personnel (unavailable ground crew, bad weather...).

## What is Safedock?



Display, video camera and lasers.

Mounted on/near stairwells, on buildings, on posts, or on jetbridges.

Connected to power and network.

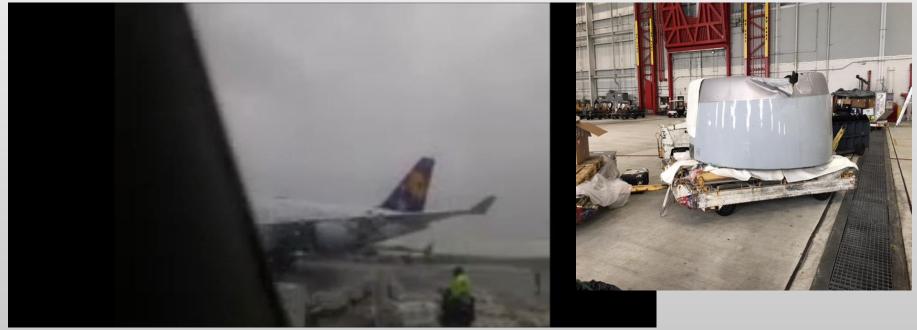
#### What it Looks Like

## Why Is It Needed?



**Near Miss** 

## Jet Engine Damaged by Truck



**Actual Collision** 

## Safedock History at SEA

First Airport in US to install Safedock

- 2005-2007 Delta Airlines realignment on Concourse A
- 2007 Alaska Airlines trial on D1-D4
- 2012 American Airlines realignment on D7-D9
- 2015 Alaska Airlines safety measure for tight gate space
- 2016 Plan to upgrade old and expand to more gates
- 2017 NSTAR includes Safedock at all gates at NSAT

#### Safedock Initiatives at North American Airports

•	Miami	18	expansion
•	Atlanta (Delta gates)	155	new
•	Toronto	152	expansion
•	LaGuardia	41	new
•	San Francisco	41+	new
•	Chicago	10+	expansion
•	Los Angeles	28+	expansion

We Are Part of a Trend

## **Recommended Plan**

- Airport-Wide advanced Safedock units
  - Larger Pilot/Ground Crew Ramp Information Display
  - Video Cameras
  - Obstacle Scanning & Alerts
  - Leverage IAF project by procuring units they install
  - Complete the installation of Safedock units airport-wide for operational consistency
- Gate Operating System
  - Leverage data for operations and gate usage analysis
  - Link to other systems

Plan: Airport-Wide Units and Gate Operating System

# Why Airport-Wide?

- Airlines Support:
  - Delta's General Manager, Corporate Real Estate request
  - International Carriers request
    - Icelandair, Virgin Atlantic, British Airways, Lufthansa, ANA and Emirates.
  - American Airlines support their gates
- North Satellite is installing units on all gates
  - Standardizes Safedock units at all Alaska gates
- Airport-wide deployment creates consistency in operations

Installation Justification

## **Cost and Schedule**

#### Cost

Advanced units with cameras & scanning + GOS + interfaces + infrastructure + installation

= \$29,200,000

- Schedule
  - Commission Authorization for Design, GOS, IAF units
    Q1 2018
  - Commission Authorization for Construction
    Q1 2019
  - Substantial Construction Completion

How Much / How Long

Q1 2020