

The image features a stylized, semi-transparent orange and blue gradient overlay on a background of an aircraft cockpit. The cockpit instruments, including various gauges, dials, and digital displays, are visible through the overlay. The text 'Avionics' is written in a large, bold, blue, italicized sans-serif font. Below it, the word 'FOR' is written in a smaller, light blue, spaced-out sans-serif font, flanked by horizontal lines. At the bottom, the word 'NEXTGEN' is written in a large, bold, blue, spaced-out sans-serif font.

# Avionics

FOR

# NEXTGEN

[www.AvionicsForNextGen.com](http://www.AvionicsForNextGen.com)

# NextGen and Allegiant Air



**Ankit Nanda**  
Director of Engineering

# Agenda

- Current fleet status
- NextGen and Allegiant Air
- ADS-B Out compliance plan
- The 2020 challenge

## Current Fleet Status

- MD-80 Fleet
  - Retirement prior to 2020
- Airbus Fleet
  - Oldest aircraft: 700 series MSN
  - Newest aircraft: 7000 series MSN

## NextGen and Allegiant Air

- MD-80 Fleet
  - No plans for NextGen incorporation
- Airbus Fleet
  - Primary goal: ADS-B Out
  - Under evaluation:
    - Controller – Pilot Data Link Communications – CPDLC
    - Streaming weather in flight deck

## ADS-B Out Compliance Plan

- Two solutions for ADS-B Out for Airbus fleet
  - MMR equipped aircraft
    - Rockwell Collins STC
  - Non-MMR equipped aircraft
    - Allegiant Air STC

## Rockwell Collins Solution

- Steps to compliance
  - STC efforts
    - Flight test completed
    - Equipment approval and availability in 2019/2020
  - File for FAA exemption 125555
    - Interim solution between 2020 to 2025; precautionary
  - Prior to January 1, 2020:
    - DO-260B compliant transponder installation
    - SBAS/WAAS GPS installation

## Allegiant Air STC Solution

- Applicability
  - Aircraft with no MMR installed
    - Approximately 40 aircraft within the United States
    - 2 aircraft in Allegiant fleet
- Equipment installed
  - TSO C129 SA On GPS
- End goal
  - DO-260B compliant transponder
  - TSO-C145c WAAS GPS



## Allegiant Air STC Status

- STC project number obtained
- Prototype installation in 2018
  - Will include a flight test
- Aim: STC issuance by end of 2018
- Will be first 2 aircraft in Allegiant fleet to be ADS-B Out compliant prior to 2020
- Flight deck equipment
  - Similar indication system to Rockwell Collins solution
  - Allow for seamless integration for flight crews

## The 2020 Challenge

- Approved solution/equipment availability
- Tight timeline
- Unknown parameters for flight tests
- Aircraft availability for extended maintenance visits
- Cost

**Thank you**