

# SOLAKONFERANSEN 2019:

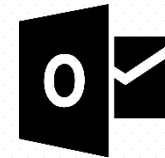
Intelligent Connectivity:  
Communication & Being Online During Flight

# What does intelligent connectivity mean to you?

We believe intelligent connectivity can enhance the safety and efficiency of aviation operations.



NETFLIX



# Agenda

- Introduction
- Air-to-Ground
- Ground-to-Air
- The Future



# Ruben Stepin

Manager, Advanced Systems Group

Senior Expert on:

- Electronic Flight Bags
- ICAO GADSS
- Real-time Intelligent Connectivity

APPROACH:

## Creating Customer Value Through Intelligent Connectivity





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# 1 AIR TO GROUND

Real-time Monitoring &  
Real-time Communications

# 2 GROUND TO AIR

Real-time Automation &  
Real-time Situational Awareness

How many man-hours are required to manually offload Flight Data for one aircraft each year?

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**A**

Five (5)

**C**

Twenty-five (25)

**B**

Ten (10)

**D**

Fifty+ (50+)



# Air to Ground

Real-time Monitoring &  
Real-time Communications





How many of you currently  
conduct:

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1.

Real-time  
Tracking

2.

Real-time SATCOM  
Communications

3.

Real-time  
EFBs

4.

Real-time  
Monitoring



# Real-time Monitoring

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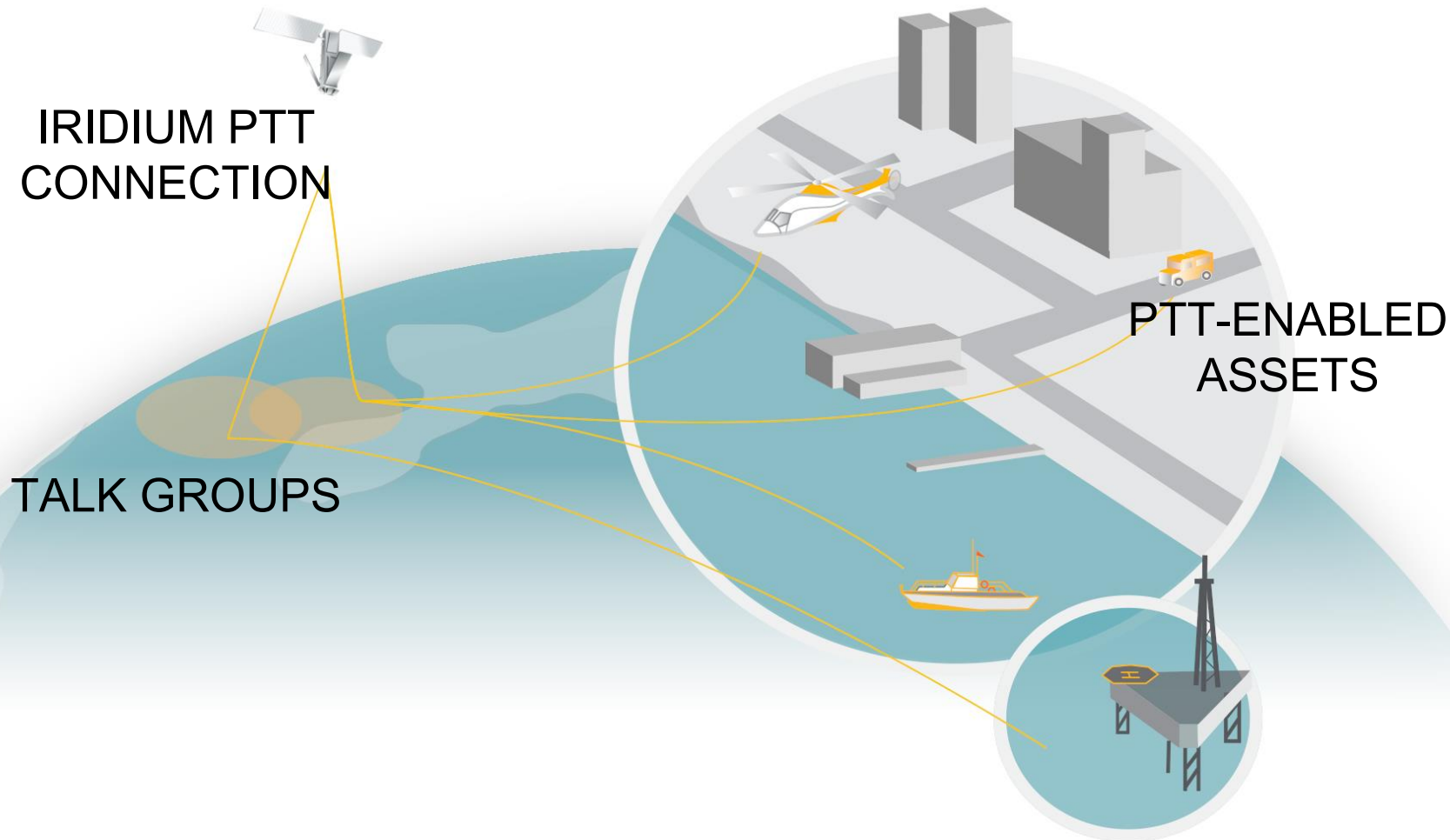
- Real-time HUMS, FDM, Engines, Aircraft Tracking
- Increase safety oversight & operational efficiencies



# Real-time Communications

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- SATCOM
- Push-to-Talk



# Ground to Air

Real-time Automation &  
Real-time Situational Awareness



# Real-time Automation

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Current technology allows for:

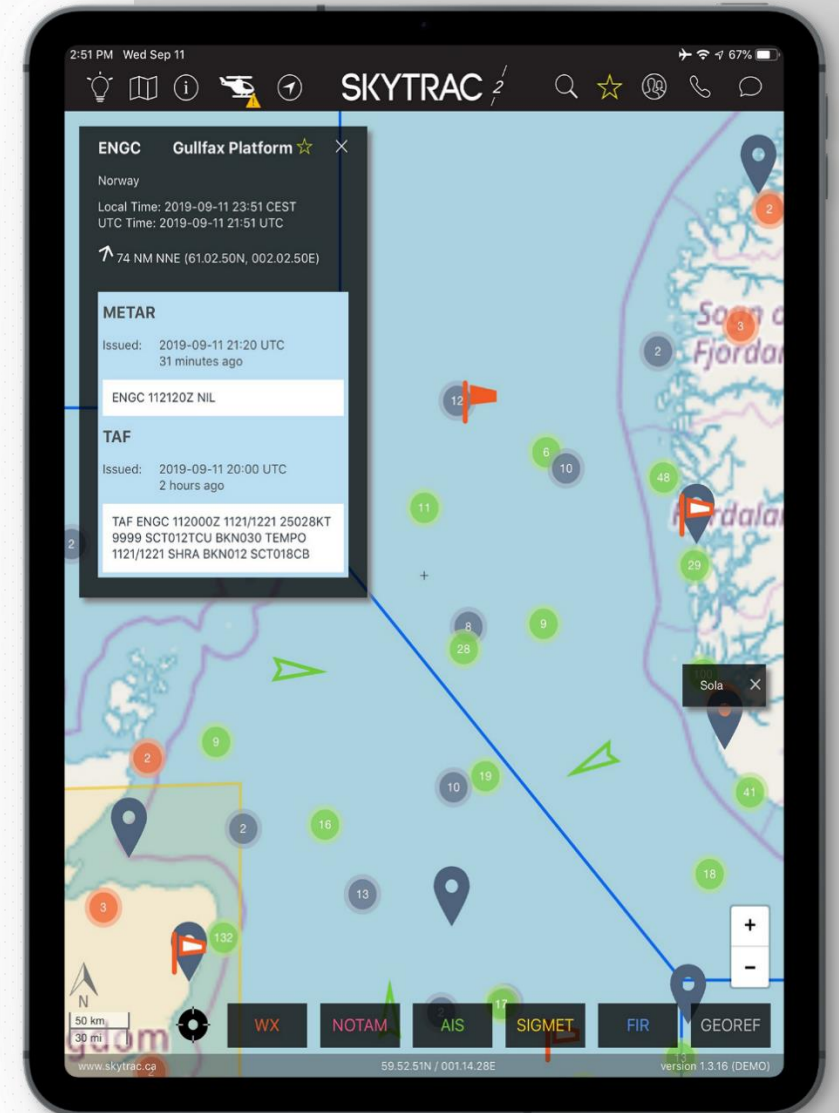
- PAX Manifests
- Fuel Uplift Forms
- Risk Assessment Forms
- Journey Logs & Flight Reports
- TechLogs
- Charting Map Updates



# Real-time Situational Awareness

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- Weather
- Sea State
- ADS-B, Marine-, Drone-AIS
- Oil Rig & Wind Farm
- 4D Trajectory Operations



# IoT: Traveling at the Speed of Knowledge

Increased Bandwidth and  
Connected devices



# Increasing Bandwidth

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- The age of connectivity will bring more data
- Advanced, real-time analytics
- Revolutionary applications



# Connecting Multiple Devices

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- Real-time connections of avionics, EFBs, maintenance, OCC, and more
- Improve safety and passenger experience

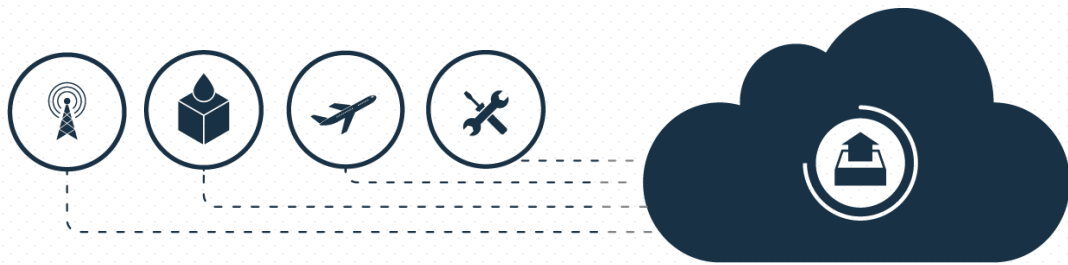




# Future Connected Maintenance

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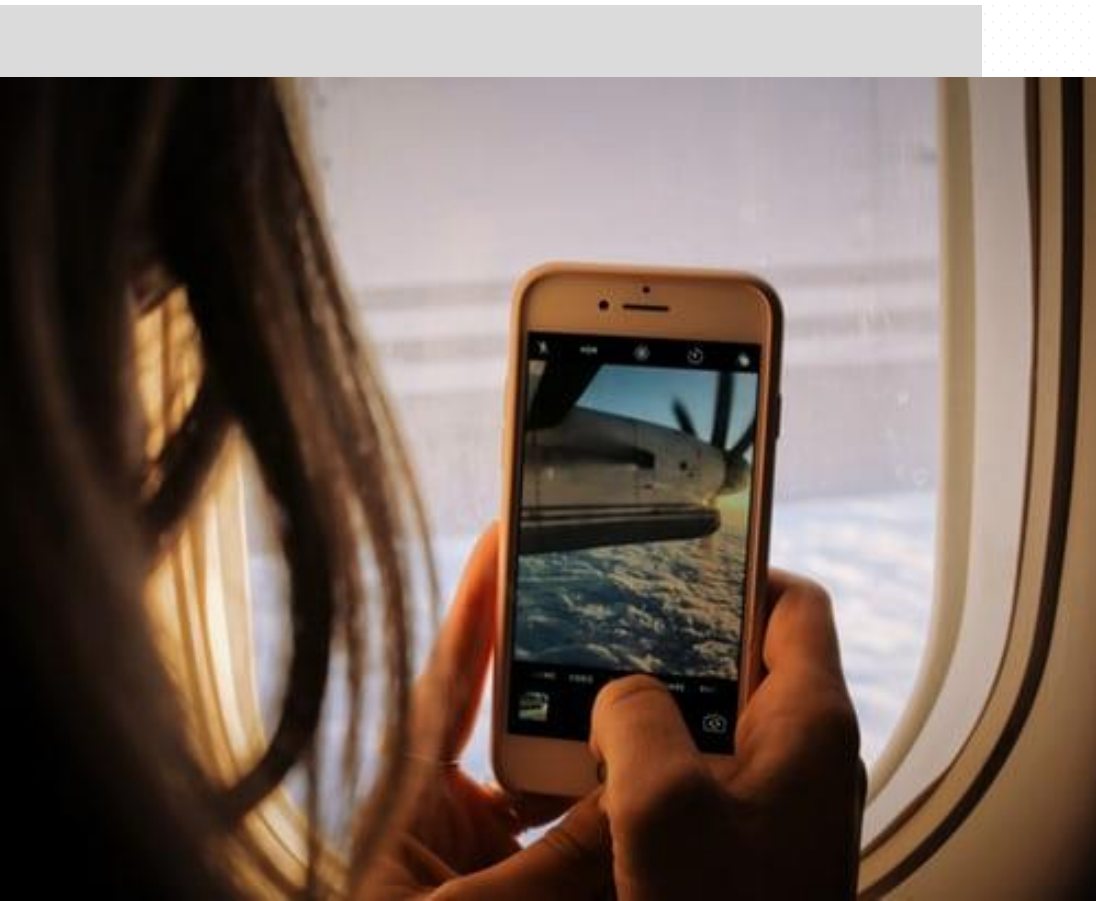
- Real-time Communication
- 3D Printing
- Aircraft Supply
- Installation



# Future Connected Passenger

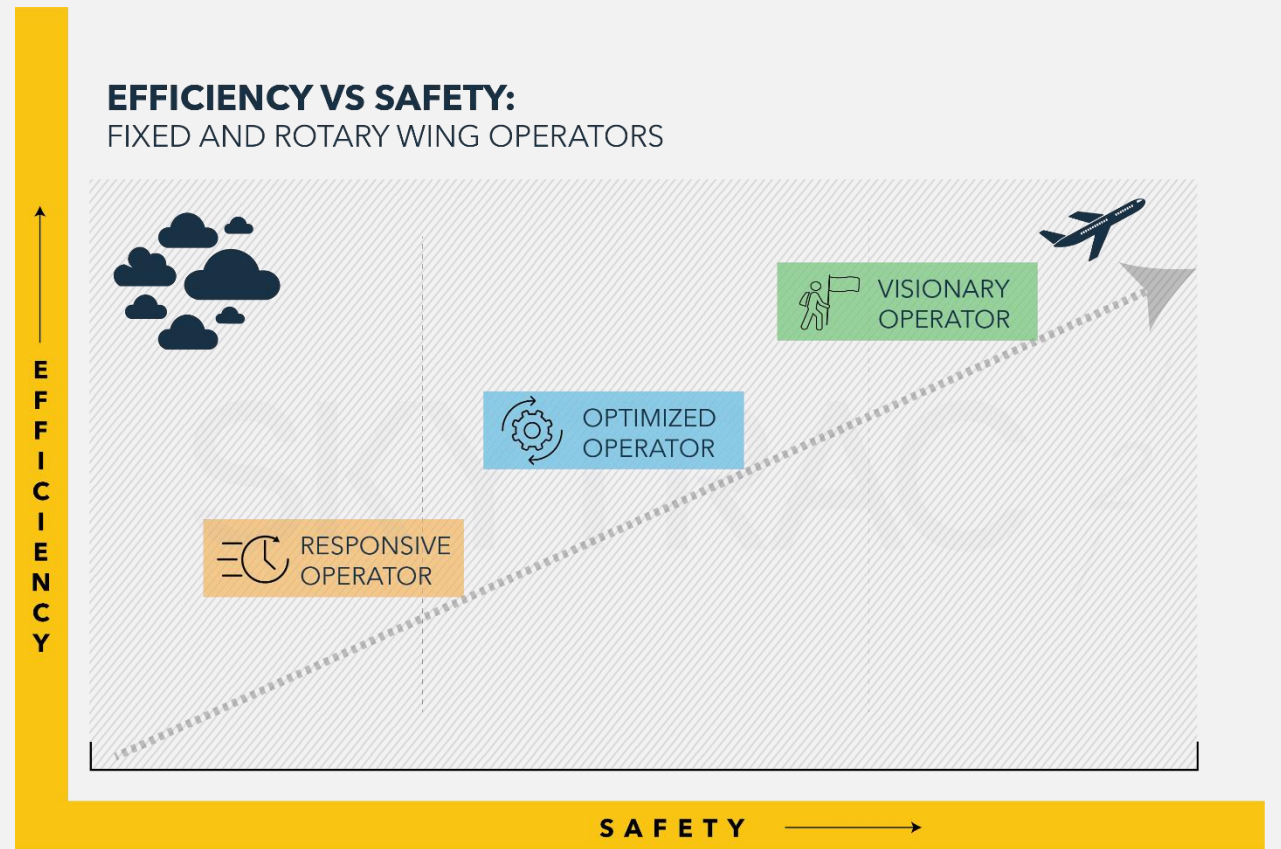
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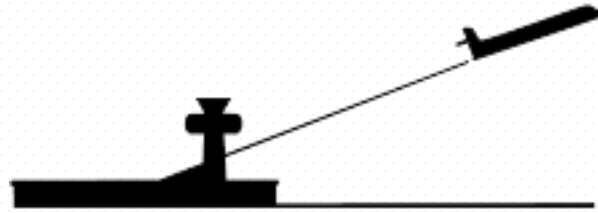
- Passenger “First” Principle
- Real-time Communication Flow
- Social Media Feedback
- Operator Differentiator



# Enabling Growth

- Iridium speeds have increased 625-fold to 1.5 Mbps
- GigSky provides over 25+ Mbps data transfer rates





# THANK YOU!

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