SITAONAIR
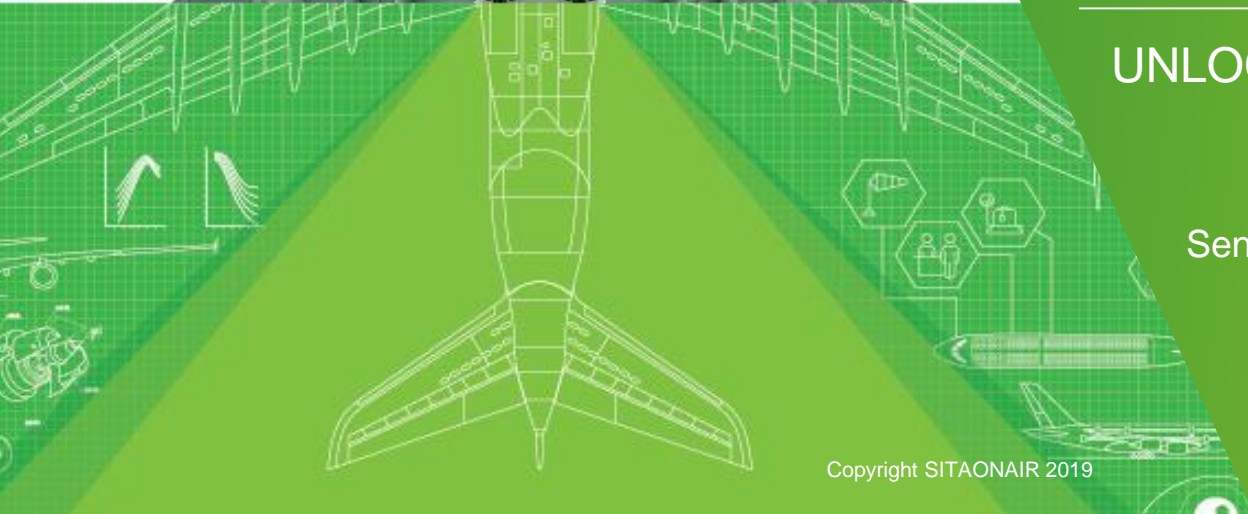
The Next Great Leap in Aircraft Communications. Are you prepared?

UNLOCK POSSIBILITIES TODAY.

Deepak Garg
Senior Manager Business Development
SITAONAIR

What is our aircraft portfolio about?

DIGITAL DAY OF OPERATIONS

- Track and optimize in-flight routing and turn around
- Empower crew engagement
- Assisted pilot operations
- Effective communication and collaboration

AIRCRAFT DATA MANAGEMENT

- Overcome the challenges of airline, airframer, MRO and OEM data exchange

CABIN CONNECTIVITY SERVICES

- Enable dedicated, nose-to-tail connectivity and universal coverage
- Provide a richer and more interactive infotainment experience for passengers

UNIFIED AIRCRAFT COMMUNICATIONS

- Unlock significant cost savings and efficiencies with both data and voice services
- Enhance air traffic control procedures with complete integration from ATC to cockpit
- Facilitate secure, real-time data exchange

SITAONAIR

Our vision

To support the airline and Air Navigation Service Provider community. Helping them to that power through the next decade and beyond, supporting the transformation of aircraft, airline and airspace operations

Market evolution

Passenger numbers to double t**o 8.2 billion** by 2037

Global fleet size to exceed **48,000** aircraft by 2037

By 2035 more than **100,000 aircraft** will take off **each day**

Modern aircraft data volumes are booming

Sources
IATA, Airbus & Boeing

New generation aircraft communications: Challenging times

Communications

Navigation

Surveillance

The approach is changing and requires constant…

Management

Planning

Innovation

Different aircraft comms domains require different link characteristics

Aircraft Control Domain

Safety of Flight

Aircraft Control (ATC)

Aircraft Information Services Domain

Non-Essential Applications

Administrative / Operational

Passenger Information & Entertainment Services Domain

Entertainment & Network Services

Passenger

Domains are defined by the International Civil Aviation Organization (ICAO)

| VHF / VDL | Inmarsat Classic | Inmarsat SB-S | Iridium Block One | Iridium Certus | Cellular | Inmarsat SBB | Cabin Broadband |

...and **not all links** are **created equal**

Untapped potential for connecting applications

Weather and disruption management

Predictive maintenance, Pre-positioning

Data management Data access

AOC / MOC communications

On-ground network partners

Black box data streaming

Telemedicine

Charts, e-tech logs, flight briefs

Flight optimization

Courtesy of Inmarsat
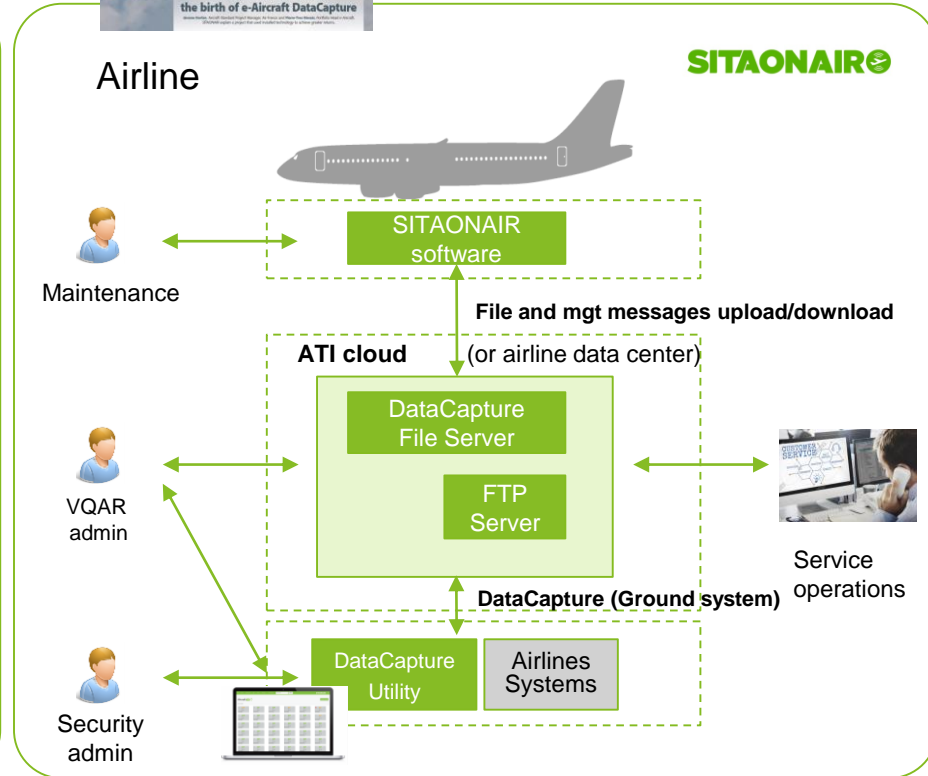
e-Aircraft® DataCapture
Synopsis – solution to retrofit 120 A320 family

- **Solution components**
  - Software installed on-board AID
  - Ground Server at airline or ATI cloud
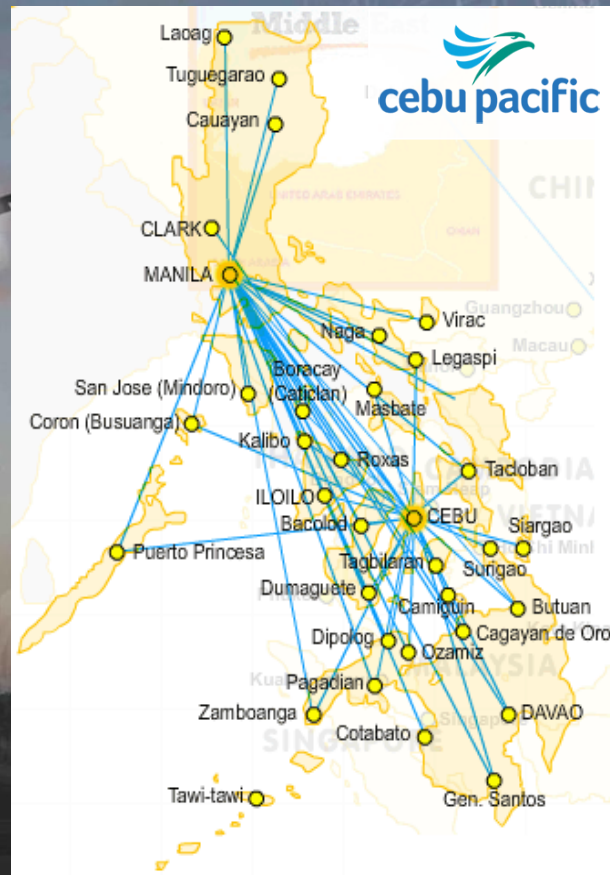 - User friendly web interface for airline

- **What it does**
  - On-board A717 data capture (QAR/DAR)
  - Configurable communication policies
  - Automatic transfer of aircraft data on ground (through IP coms)
  - Fully integrated within airline environment
  - Proactive monitoring and Service operations

Airline

SITAONAIR software

Maintenance

File and mgt messages upload/download

ATI cloud (or airline data center)

DataCapture File Server

FTP Server

VQAR admin

Service operations

DataCapture (Ground system)

DataCapture Utility

Airlines Systems

Security admin

Customer case study: Introducing ACARS over Cellular

- Complement VHF/VDL network
- Expansion of coverage
- Higher bandwidth than traditional ACARS media, enabling larger volume data transmission
- Unlimited transmission at a fixed cost
- No major changes to aircraft
- Seamless service delivery through consistent interfaces
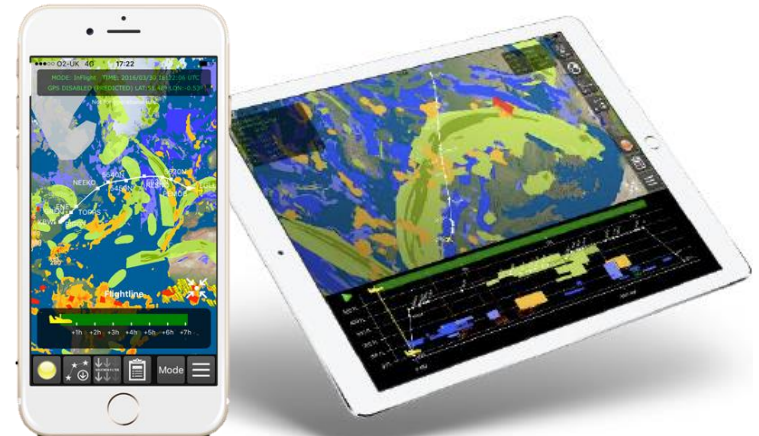- Global service management and support

Other airlines in implementation or active dialogue

Use case: e-Aircraft® AppsConnect for eWAS

Upload eWAS weather files and update relevant weather in-flight

Main features

- **Initial weather files via Cellular or Wi-Fi**

  Possible upload via the Aircraft Interface Device on board

- **Weather file updates in-flight via ACARS (or Satellite)**

  Adapted format (corridor profile, notifications)

  Updates only when relevant on flight route

  Least cost routing (Airline policy based)

- **Different configuration possible per flight**

  Type information of updates, frequency, etc.

  Dependent on destination airport

- **Flexible architecture solution**

  Can be installed on different device types

Case study: A Large European carrier

Delivering the connected aircraft vision

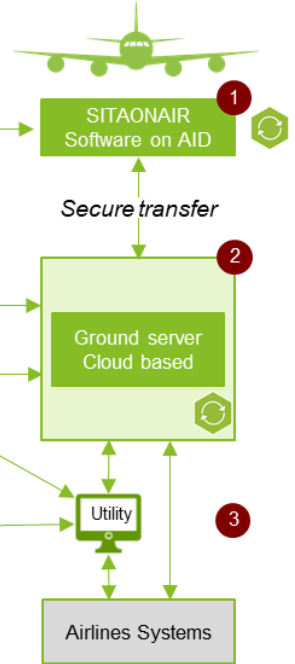AIRCOMConnect®

AppsConnect®   DataCapture®   AOIPConnect®   IOTConnect®

SITAONAIR   Airline

Maintenance

Service operations

Application admin

Security admin

SITAONAIR Software on AID   **1**

Secure transfer

Ground server Cloud based   **2**

Utility   **3**

Airlines Systems

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Simplicity

We remove the complexity of dealing with multiple suppliers, internal integration IT projects and associated costs.

Innovation

We bring access to new, disruptive technologies, which are combined and connected to deliver innovative, end-user focused solutions.

Reliability

We deliver peace of mind that aircraft communications will "just work" with services that are industrialized, highly resilient and available by design.

Our Mission

We deliver to our customers the promises of the connected aircraft, and power innovation with recognized expertise and future-proof solutions.

Thank you

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