Avio Aero
A GE Aviation Business

Project Taranta

The RFID solution for Avio Aero

October 5th 2016

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Part of a great Family

- Energy management
- Oil & gas
- Home business
- **AVIATION**
  - Commercial engines & services
  - Military engines & services
  - BGA & integrated systems
  - Avionic & Digital system
- Transport
- Power & water
- Capital
- Health care

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Brindisi

MANUFACTURING SITE

650+
employee
51,000+
sqm

CORE EXPERTISE:

Frames&Cases, Military MRO, Tests, M&I

Air Force fleets rely on our Brindisi plant: MRO (Maintenance, Repair and Overhaul) centre of excellence for military aircraft engines. Here's the focal site for aeroderivative gas turbines for marine and industrial applications. And the finest and biggest Frames and Cases for commercial engines are also manufactured here.

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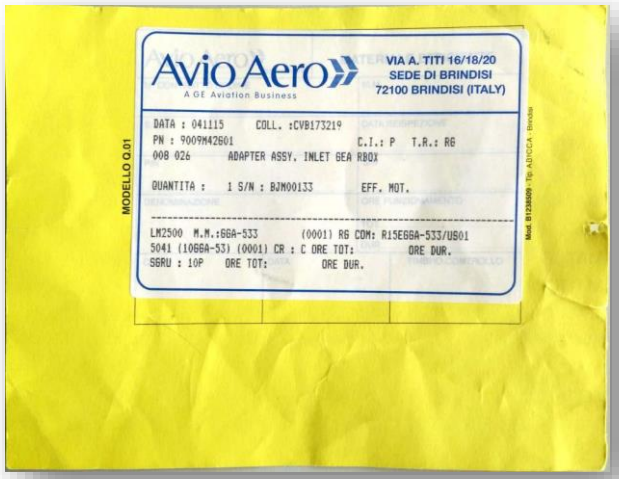
TARANTA

taranta

BUSINESS NEED

- End-to-end items traceability
- Automated data entry
- Minimize predictive manual operations
- Real-time item visibility (e.g search, location)
- Automated KPI's
- Paperless



TECHNOLOGY

RFID

Pros

- No battery (passive)
- Low cost per single tag
- Tags can be attached to efficiency cards

Cons

- Not effective if shielded by metal
- Tracking obtained through gate crossing

Bluetooth Beacon

Pros

- New/promising technology
- Tracking is very accurate

Cons

- Short battery life
- Expensive (10x)
- Meant to stay in a fixed location
- IT solutions not ready for integration at a corporate level

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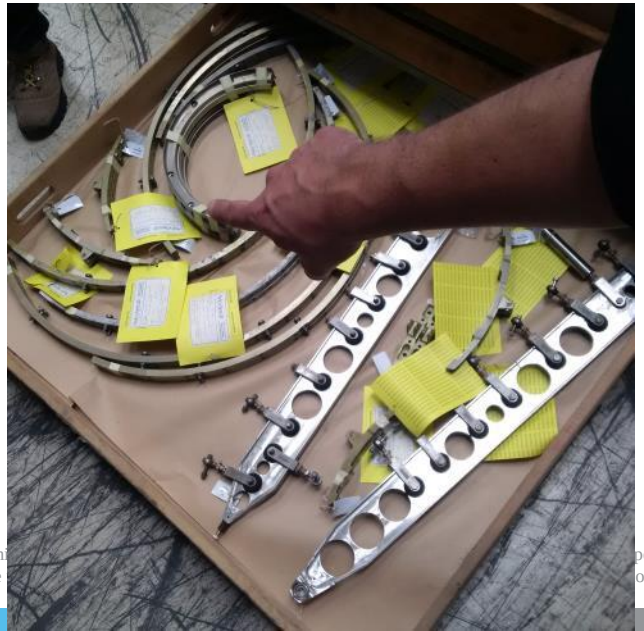
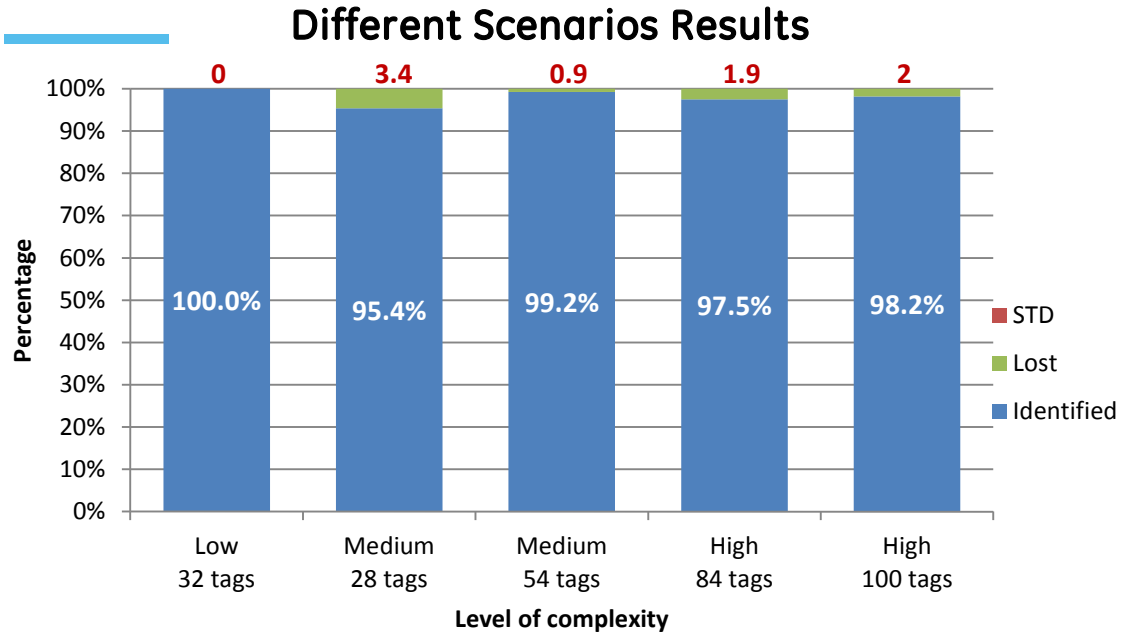
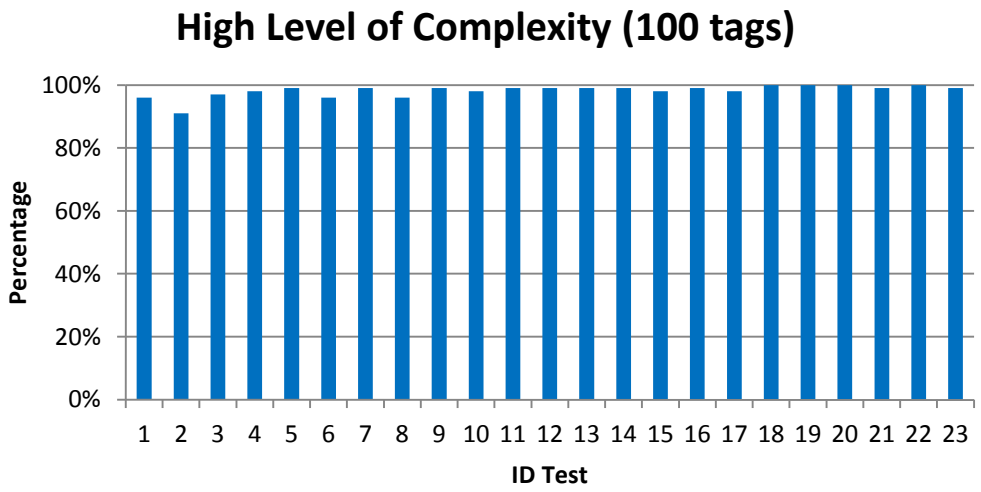
RFID TECHNOLOGY



GATE CROSSING - TEST RESULTS





Scenarios

- Increasing levels of complexity

Test variables

- Signal intensity of the tracking system
- Gate crossing speed

Cons

- Undetected tags covered by large metal parts (i.e. turbine disk)
- Overlaid tags interference

Pros

- Reliability independent of tags number
- Not responding tags were easy to identify

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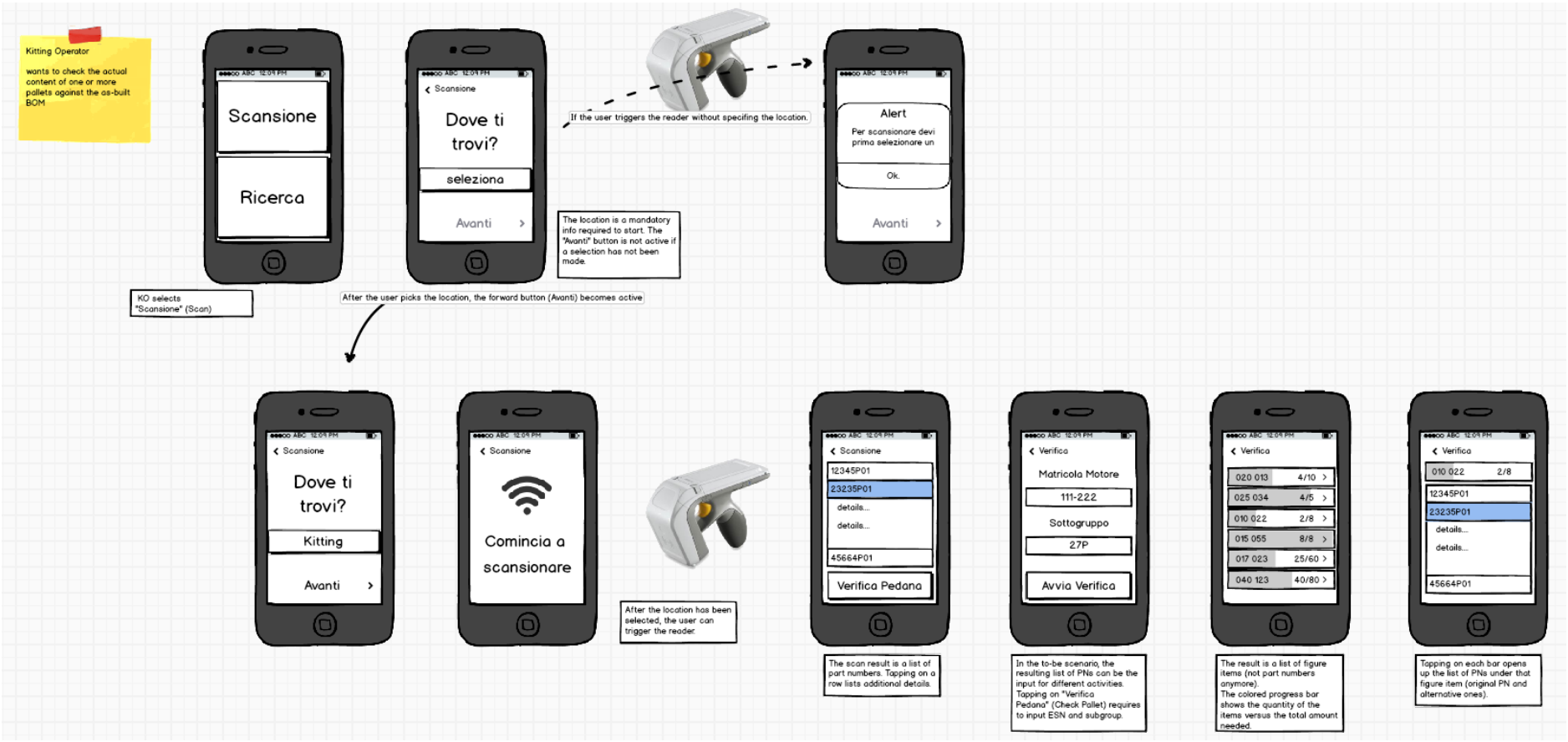
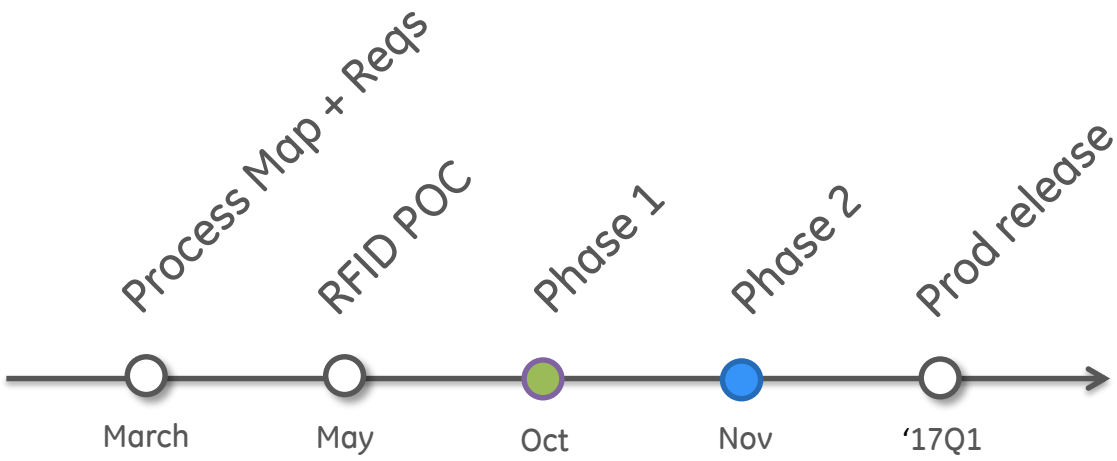
MOCK-UPS



NEXT STEPS



Phase 1: hand-held device + mobile app / web portal mock-up (no I/F, no middleware)

Phase 2: middleware installed + RFID printing

QUESTIONS