POWERING POST-COVID-19 RECOVERY WITH THE CONNECTED AIRCRAFT ENVIRONMENT

Why leveraging a world of connected capabilities will be pivotal in the airline industry’s new normal

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WHITE PAPER
GETTING READY FOR RECOVERY

By Yann Cabaret, VP Strategy, Product & Marketing

The COVID-19 crisis has brought one of the biggest shocks to the airline industry it has ever known. There are hopeful signs demand for air services is starting to reignite. However, we also know that emerging from the pandemic and moving forward will require absolute flexibility and adaptability from all involved.

In the weeks, months and years ahead, airlines, their service partners and passengers will have to adjust to a ‘new normal’ in order to recover sustainably. Every facet of the aircraft operation and experience will need the ability to flex and adapt at pace, to be responsive to changing restrictions, requirements and passenger demands.

CALLING ON THE CONNECTED AIRCRAFT

But this is also against the backdrop of the tough financial hit the air transport industry has taken due to COVID-19. As a result, it will need and want cost-effective, streamlined and tailored service capabilities to get back up to speed.

Operators will remain understandably focused on carefully managing resources and drawing maximum value from their fleets and data. In the face of a prolonged slowdown, carriers will look to scaled-back fleets of newer, connected aircraft that offer greater operational efficiencies in terms of costs and carbon footprint. Leveraging the benefits offered by both the connected aircraft and the digitally optimized operating environment will remain pivotal to their strategies for the foreseeable future. Pro-efficiency capabilities offered by digitally transformative solutions and services – such as automation, real-time data exchanges and collaborative air/ground working – will have a pivotal role to play.

TRUST AND AGILITY

This digital shift calls for trusted expertise, technologies and innovation to enable crews to digitalize and automate operations wherever possible; drive time and cost efficiencies airline-wide; ensure passengers feel safe and satisfied when they fly and advance sustainable practices.

Thankfully, the tools and competences needed to power an intelligent, flexible and agile recovery in this changed world are already here.

REBUILDING CONFIDENCE

With a strong bedrock of collaboration, our innate agility and our commitment to the industry, we believe we can get airlines and passengers flying again with confidence.

On the following pages, our SITA FOR AIRCRAFT portfolio experts give a flavor of how we can help.

“EMERGING FROM THE PANDEMIC AND MOVING FORWARD WILL REQUIRE ABSOLUTE FLEXIBILITY AND ADAPTABILITY FROM ALL INVOLVED.”
DIGITALIZATION: THE KEY TO WORKING SMARTER, NOT HARDER

By Igor Dimnik, Director, Airline OCC & Crew Application Portfolio

Digitalization is all about working smarter, not harder, to save costs, time and effort. Right now, this is what airlines urgently need.

Post-COVID-19, carriers face multiple day-to-day operating considerations. How to mobilize cabin crews safely, while ensuring quality passenger service. How to rebuild safe, sustainable operations with fewer staff. How to collaborate air/ground and across an OCC team working remotely. How to rapidly modify existing routes or adopt new ones. How to keep turnaround efficient with regular cabin sanitization. Not to mention, address carbon emissions targets.

BETTER USE OF RESOURCES

We’re applying our expertise to actively map and develop comprehensive and cost-effective digitalized solutions, not just to help airlines adapt to the current situation, but to transform for the long term. While COVID-19 restrictions have brought things to a halt, airlines have a moment to rethink their operation – be it to factor in systematic efficiencies, become more sustainable, streamline and maximize resources through sharing and partnerships or even outsource service capabilities such as OCC.

Digitalizing the day of operations enables you to achieve these things by harnessing smart, integrated technologies and capabilities that better use resources, foster communication and collaborative working, and promote safety and sustainability.

RESPONSIVE, INTUITIVE, AUTOMATED

Take automation. Being able to automatically generate flight-route alerts, rather than only relying on manual monitoring, means flight dispatchers can oversee more flights. Systems which automatically collate the best meteorological data, and give pilots and OCC the same view, reduce admin and boost air/ground collaboration. A tracking solution which automatically flags an aircraft’s route deviation reinforces safety and confidence.

Digital tools can also ready airlines for adapting or adopting new routes. Intuitive situational apps, stacked with airport, route and rerouting information, enable airlines to respond to last minute changes.

Similarly, providing flight attendants with a connected crew tablet to access flight information and process contactless payments, is a no-brainer now. With passenger data to hand, cabin crews can better manage all passenger issues, from social distancing and wellbeing needs to relaying live passenger health updates.

MOVING FORWARD

Digitalization also offers opportunities for minimizing carbon footprints. Dynamic route optimization, for example, enables airlines to fly the most fuel-efficient routes, while enhanced situational weather awareness can inform fuel loading.

There is a long road ahead. But together, we can help the industry move forward.
EMPOWERING FUTURE PASSENGERS WITH INFLIGHT CONNECTIVITY

By Sabine Taillardat, Team Lead, Cabin Connectivity Services

Passenger air traffic fell by 95% in April 2020 compared to the previous year. This staggering statistic illustrates the profound impact COVID-19 has had on the airline industry and passenger experience. As airlines begin to regain ground, they will face a dual challenge of reinforcing passenger health, safety and confidence onboard, while also keeping passengers satisfied with the service they receive.

Inflight cabin connectivity services have a powerful role to play here. To minimize transmission, contactless payments and touch-free travel will magnify the pre-existing ‘bring your own device’ trend. To feel comfortable onboard, passengers will seek the same control and touchless autonomy they get on the ground – not only using their device to stay connected, informed and entertained, but as a personal ‘remote control’ to pay for duty-free goods inflight, book an at-destination experience, control their inflight entertainment, or check the status of their next flight.

With our best-in-class high-speed inflight Wi-Fi and cellular 4G, airlines can ensure a frictionless inflight connectivity (IFC) experience, with one-click mobile connectivity, and easy one-step payment methods for Wi-Fi.

TAILORED EXPERIENCE
Cascading passenger information effectively will also be key. With an open application programing interface, such as that provided by Internet ONAIR, airlines can tailor their IFC portals to present vital health and safety information to every connected passenger. Carriers using our inflight cellular network can similarly text passengers the same details.

Airlines recognize IFC is a ‘must-have’ service and want to provide it to increasingly digitally native flyers. But, more than ever, they also need to control costs and avoid complexity.

CONTROLLING COSTS
There are numerous ways to do this. We always work with customers to define the most appropriate packages and offers to fit their needs and optimize adoption and costs. We give airlines full sight over IFC performance and quality of experience and manage services as needed. IFC also gives airlines an opportunity to generate ancillary revenues, such as through sponsorship and with Mobile ONAIR’s 4G connectivity providing a clear, profitable IFC case. We also offer a Unified Cabin Solution, so different providers can be managed in one place, generating cost-and-time savings alongside an enriched customer experience.

VITAL ASSET
In short, our IFC solutions are flexible, agile and adaptable. These qualities will remain a vital asset to airlines who want their passenger experience to stand out in the new normal.
Lately, widespread aircraft groundings due to COVID-19 have inevitably seen maintenance and aftermarket operations grind to a halt. But as activity out on the tarmac resumes – albeit in a changed operating environment – airlines and their aviation digital service partners will want to squeeze every last bit of value out of fleet data.

Pre-pandemic, airlines, original equipment manufacturers (OEM), maintenance, repair and overhaul (MRO), airframers, part suppliers and lessors were focused on bringing their digitalization and data management strategies to fruition. Now, with costs tightened, fleets downsized, and crews reduced, digitalization has to come into its own. And that, in turn, makes achieving the timely data management, sharing and analytics that underpin it even more vital.

ADDRESSING DATA-SHARING CONCERNS
Retrieving prompt actionable insights for aircraft and parts performance, drives informed decision making and precision working, and so reduces costs and risk through increased operational understanding and control.

But it’s also only possible if airlines and partners can truly collaborate around data, and in a trusted way – something that’s previously proven problematic.

Airlines have wanted to benefit from digital services alongside flying new generation, digitalized and data-rich fleets. However they have been reluctant to relinquish their aircraft data sets to proprietary platforms owned and operated by a third party. As a result, aviation digital service partners have struggled to get the valuable data they need to evolve.

INDUSTRY-WIDE COLLABORATION
In the post-COVID-19 world, however, industry-wide collaboration will remain vital for recovery, which means these issues need to be quickly overcome.

Our e-Aircraft® DataHub platform makes this simple. It mutualizes data for the industry, by providing a secure, neutral hub for airline-approved, automated data exchange – at no cost to the carrier. By acting as a trusted intermediary, with a global airline footprint, we can help OEMs, MROs, airframers, part suppliers and lessors accelerate their digital services time to market, and, by so doing, eradicate pain points for airlines.

In this way, we can make trusted, operator-led collaboration the industry norm, accelerating a digitally optimized, sustainable recovery. And with this stronger foundation in data management, the industry will be better placed to accommodate a growing new generation aircraft fleet.
REALIZING THE BENEFITS OF ENRICHED COMMS AND CONNECTIVITY

By Andy Hubbard, Head of Cockpit Communications Portfolio

Since its inception, our experts have always worked hard to evolve the aircraft communications and connectivity landscape, to meet the changing needs of airlines and airspace managers.

The rise of digitally capable, new generation aircraft – often compared to ‘flying data centers’ – is driving deployment of IP links to the cockpit. Such links bolster the connected aircraft’s potential, enabling considerably higher data throughput and newer data payloads to be delivered. In heightening the ability for aircraft to exchange a continuous flow of data, universal air/ground communications can be conducted in real-time, optimizing efficiencies.

ENHANCED COMMS AND CONNECTIVITY

These IP links complement existing mission-critical VHF/VDL ACARS/datalink services to form fault-resilient, multilink services with global reach. Over time, they will underpin the overall aircraft data-driven ecosystem alongside the global datalink network of today.

The industry was already realizing the benefits of this enriched comms and connectivity landscape pre-COVID-19. Network resilience, ensuring business continuity; optimizing cockpit and cabin applications inflight; making the aircraft Internet of Things (IoT) a reality; and enhancing dialogue and collaboration between air/ground crews, to name but a few.

INCREASINGLY RELIANT

Now the industry faces a more complex operating context with added benefits, but also implementation challenges, to address. This makes the industry increasingly reliant on flexible and responsive connectivity, and communications services, to meet its obligations to passengers and crew, and keep communications flowing through every flight stage in a cost effective and scalable manner.

As an example, our ACARS over IP or cellular service offers instant benefits. It allows operators the use of 3G/4G (and soon 5G) cellular networks to exchange non-mission-critical ACARS messages. This not only interoperates with conventional channels, but is more cost effective, further increases throughput and resiliency, and frees up VHF/VDL networks for priority messages. Additionally, it enables airlines modifying or adopting new routes beyond existing VHF/VDL coverage to still use ACARS cost effectively.

MEETING INDUSTRY NEEDS

We are also actively responding to industry needs by developing powerful digital remote working spaces for OCC. Our solution will enable ACARS messaging across aircraft communications domains to be handled with control room immediacy and precision, but from anywhere airline personnel are based, underpinned by a global architecture with business continuity built in as standard.

During these uncertain times, the constant connectivity provided by a Unified Aircraft Communications (UAC) ecosystem, gives airlines unlimited flexibility to rebuild a digitally optimized, safe and resilient operation.
SITA is 100% owned by the air transport industry and dedicated to its success. We have always taken a collaborative approach, one that builds trust with all industry players. We are already working with airlines and other organizations to address our new common challenges. Together, we can get ready for recovery, and beyond.

Discover how we can help. Visit sita.aero/aircraft, submit an enquiry form, or email worldwide@sita.aero.

MOVING FORWARD IN THE ‘NEW NORMAL’

To navigate this critical period of recovery, the industry needs to harness an unrivalled level of expertise that brings together every element of the connected aircraft environment.

It requires a trusted, tech-agnostic and neutral partner to assemble and integrate a mixture of technologies, aircraft applications and connectivity solutions, that deliver operational efficiency and cost effectiveness, crew and passenger safety and satisfaction, and build-in sustainable practices.
SITA AT A GLANCE

Easy air travel every step of the way.

- Through information and communications technology, we help to make the end-to-end journey easier for passengers – from pre-travel, check-in and baggage processing, to boarding, border control and inflight connectivity.
- We work with about 400 air transport industry members and 2,800 customers in over 200 countries and territories. Almost every airline and airport in the world does business with SITA.
- Our customers include airlines, airports, GDSs and governments.
- Created and owned 100% by the industry, SITA is the community’s dedicated partner for IT and communications, uniquely able to respond to community needs and issues.
- We innovate and develop collaboratively with our air transport customers, industry bodies and partners. Our portfolio and strategic direction are driven by the community, through the SITA Board and Council, comprising air transport industry members the world over.
- We provide services over the world’s most extensive communications network. It’s the vital asset that keeps the global air transport industry connected.
- With a customer service team of over 2,000 people around the world, we invest significantly in achieving best-in-class customer service, providing 24/7 integrated local and global support for our services.
- Our annual Air Transport and Passenger IT Insights reports for airlines, airports and passengers are industry-renowned, as is our Baggage IT Insights report.
- In 2018, we had consolidated revenues of US$ 1.7 billion.

For further information, please visit www.sita.aero

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