

AIRCOM® SATELLITE VOICE

How satellite voice services are transforming life for ANSPs

Marc-André Desrosiers, Associate Product Manager, SITA FOR AIRCRAFT

As the world continues to fly more than ever before, Air Navigation Service Providers (ANSPs) are faced with the constant battle of keeping an increasingly congested airspace running smoothly. Voice communication services are becoming increasingly critical to this aim, remaining a fundamental component of the air traffic control toolkit.

Added to the challenge of increasingly congested skies, a growing number of safety mandates and demand for next-generation air traffic management practices mean that the pressures on the entire air transport industry have never been greater.

With these challenges showing no sign of abating, seamless and clear voice communications are required for ANSPs to function effectively. SITA FOR AIRCRAFT's AIRCOM® Satellite Voice service is set to deliver this transformative capability.

WHAT IS AIRCOM® SATELLITE VOICE?

Enabling satellite voice communication via Inmarsat and Iridium networks, SITA FOR AIRCRAFT's satcom voice service – AIRCOM® Satellite Voice – enables seamless air-to-ground and ground-to-air satellite voice communication

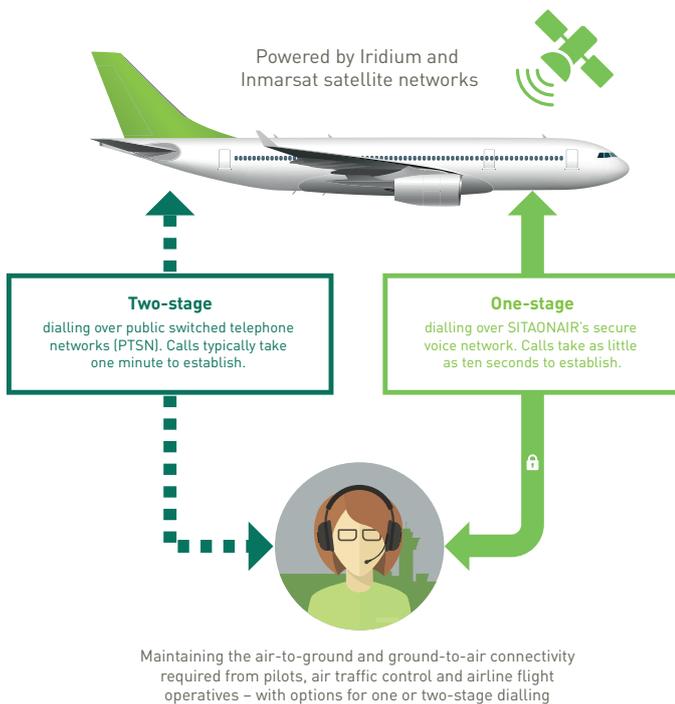
that keeps cockpit and ground staff in clear contact at every stage of the flight. AIRCOM® Satellite Voice is also fleet agnostic, capable of working across all airframe types and all cockpit satellite communication networks.

WHAT BENEFITS WILL SATCOM VOICE SERVICES BRING TO ANSPS?

As Marc-André Desrosiers, Associate Product Manager, SITA FOR AIRCRAFT, sees it: "Perhaps the main advantage of satcom voice is the ability to provide global coverage of superior quality to traditional High Frequency (HF) or Very High Frequency (VHF) voice coverage, which delivers major safety benefits. Thanks to partnerships with the likes of Inmarsat and Iridium, it is possible to provide coverage for aircraft flying over oceans or remote regions, where HF and VHF coverage has been hard to implement or poor in quality."

Importantly, satcom voice also provides simplicity – granting authorized ground users easy and instant access to aircrew, alleviating workload and enhancing efficiency. Not only does it remove the need to use both radios and satellites on a defined route, it enables authorized ground users to initiate a call without having previous knowledge of the satellite network of satellite region the aircraft is flying in.

The security and call clarity provided by satcom voice is another major advantage. As Marc-André explains: "If air traffic control needs



Traditionally, ground-to-air calling involves two-stage dialing over public switched telephone networks (PSTN). To set up a call, the ground user will dial an access number, before entering a PIN code and aircraft earth station ID. Because of these multiple authentication stages, calls can take well over a minute to establish.

Thanks to faster and secure private ground networks, AIRCOM® Satellite Voice offers one-stage dialing, whereby calls are routed directly through a private network (IP VPN or VoIP, for example), with pre-set identifications and automatic authentication processes that bypass the need for a second authentication stage.

This simplicity – in many ways comparable to setting up a personal Skype call – means that it typically takes ten seconds to establish a connection.

to communicate with the aircraft, it is for an important reason. Pilots need to understand ATC questions and requests quickly and clearly, making the high-quality satcom voice line absolutely essential.”

In addition, AIRCOM® Satellite Voice logs can be used as Direct Controller-Pilot Communication parameters. When combined with a quick and direct line of communication, this can help ANSPs reduce separation between aircraft in a crowded airspace.

Marc-André adds: “The point-to-point nature of the connection is also secure, as unlike VHF or HF channels, it is not possible for any third parties to listen in.”

THE ADVANTAGE OF ONE-STAGE DIALING

Thanks to one-stage dialing, SITA FOR AIRCRAFT’s satcom voice offering also makes it easy and quick for ground staff to establish voice communication links with the aircraft, with the pilot able to immediately respond to requests and information, without the need to accept a radio transmission.

WHY SITA FOR AIRCRAFT IS BEST POSITIONED TO DELIVER THE FUTURE OF COCKPIT VOICE COMMUNICATION

Thanks to SITA FOR AIRCRAFT’s position as the air transport industry’s trusted connected service expert – and its ongoing work to develop digital transformation enablement for the air transport industry – it is best positioned to help make the transition to satcom voice services.

As Marc-André explains: “As SITA FOR AIRCRAFT has its own ground-to-air voice platform, we develop, operate, and take care of it ourselves, which ensures a higher quality of service and means that we can develop value-added services and features on top of that platform. In addition, SITA FOR AIRCRAFT’s continuous service monitoring and 24/7 multi-lingual support ensures that issues are resolved quickly.”

ANSP’s around the world are already benefiting from the transformative potential offered by satellite voice services. Canada’s ANSP, NAV CANADA, is already seeing positive results from AIRCOM® Satellite Voice. As Fred Cosgrove of

NAV CANADA explains: “The system is working extremely well, and we are receiving many positive reports from air traffic control officers. Calls are crystal clear and connected very quickly”

Marc-André concludes: “SITA FOR AIRCRAFT’s satcom voice solution is high-quality, truly global, reliable, and simple to use. What’s more, it is already proven and in use around the world, without any issues to iron out. Ultimately, we want to make sure that when an ANSP selects SITA FOR AIRCRAFT for a satcom voice solution, they stay with us for years. We do this by making sure that they get the best possible service and a reliable, simple, innovative, and future-proofed solution.”

As the world digitally transforms, the air transport industry has to adapt to meet the demands of the future.

Imagine having access to a global, new generation aircraft communications ecosystem, that makes that digital transformation possible. An ecosystem with in-built reliability, coverage, flexibility and innovation for all aircraft, across every network, simply-delivered.

SITA FOR AIRCRAFT is bringing forth this digital transformation for the air transport industry.

- By enabling the seamless flow of communications
- By understanding safety- and operations-critical processes
- By empowering airlines to harness the value of connected aircraft data
- By enhancing airline operations, and the onboard experience.

This is the next great leap in aircraft communications, and the solution is imminent.

Are you ready?