



## Reaching New Heights for Air Navigation Service in Papua New Guinea and the Asia Pacific Region

NiuSky Pacific Limited (NSPL), previously known as PNG Air Services Limited (PNGASL), is responsible for the management of air traffic operating within the 1.6 million square kilometres of PNG's sovereign airspace, extending from sea level to 60,000 feet. To perform its mandated functions, NSPL utilises a range of Communication, Navigation, Surveillance (CNS) facilities and Air Traffic Management (ATM) systems situated at strategic locations around the country. Over the last five years, NSPL has undergone massive transformation through a comprehensive modernisation program involving the modernising and upgrading of every aspect of its operations. In acknowledging our country's mountainous terrain and other localised issues, we have deliberately made the decision to introduce modern satellite-based technologies to complement our ground-based CNS/ATM infrastructure.

After months of robust testing and evaluation to ensure that the satellite-based surveillance data met necessary data integrity and reliability standards required for operational use, NSPL being the sole provider of Air Navigation Services for PNG, went live with Aireon's global, real-time, space-based Automatic Dependent Surveillance Broadcast (ADS-B) for air traffic surveillance on the 24<sup>th</sup> of March 2021. For the first time in our history, NSPL will be providing real time surveillance services covering PNG's entire airspace above 20,000 feet. High traffic density areas of our lower airspace will continue to be covered by a network of terrestrial-based ADS-B facilities and our new Mode S Secondary Surveillance Radar (SSR) located at the Jacksons International Airport. NSPL plans to extend space-based ADS-B coverage to the lower altitudes below 20,000 feet, sometime in the near future.

The introduction of this new space-based technology will enhance aviation safety for all airspace users. Importantly, it will also enhance efficiency through providing more opportunities for aircraft to fly routes that are more flexible and at their optimum altitudes. This will also enable NSPL, working in consultation with CASA PNG, to introduce reduced separation standards within PNG's sovereign airspace. All efficiency related measures would result in the reduction of operational costs for the airlines.

NSPL is amongst the first three Air Navigation Service Providers (ANSP) in the Asia Pacific region and amongst the first ten globally, to use space-based surveillance technology for operational purposes. This significant milestone, coupled with other advances made in our service delivery functions in recent years, has placed NSPL as one of the leading ANSPs within the Asia Pacific region and beyond.

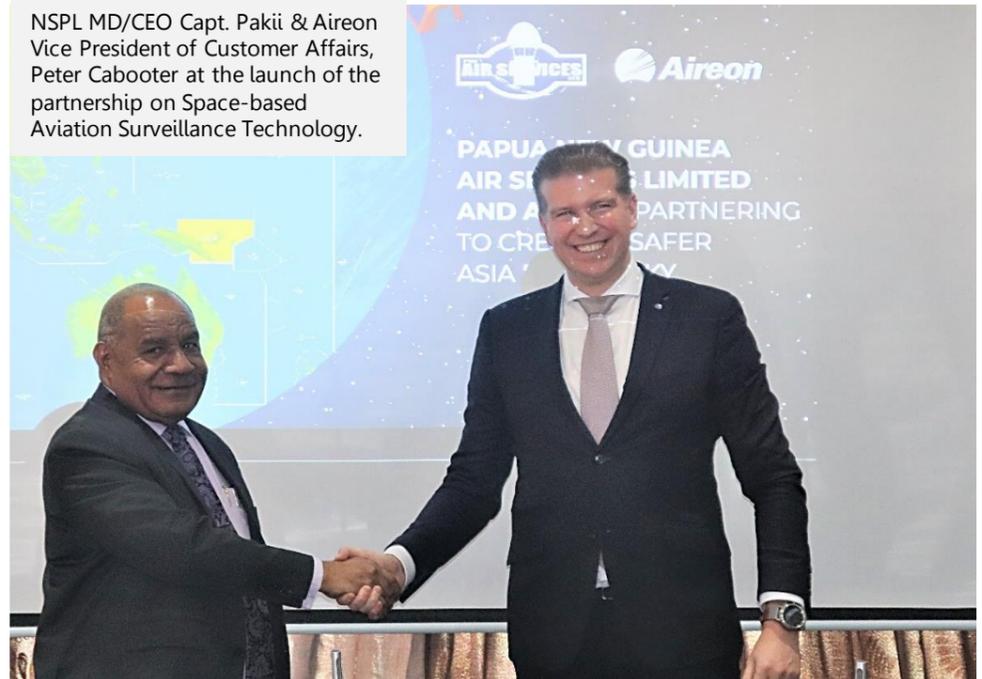
Additionally, over the next few months, NSPL will be phasing out the use of dedicated terrestrial telecommunications lines to receive ADS-B data, in favor of the more reliable International Civil Aviation Organization's (ICAO) Common Regional Virtual Network (CRV Network). The CRV Network is a multi-point, cost-effective, dedicated communication network used by ICAO Member States, and is provided by a common network service provider, PCCW Global Limited.

The carriage of Space Based ADS-B data via the CRV will be a world first and could likely set the standard concerning how other ANSPs receive this data into the future, thus launching PNG as a leader in advancing global aviation safety via the use of modern technology.

With a combination of the secondary surveillance radar, terrestrial-based ADS-B capability and NSPL's adoption of Aireon's space-based ADS-B service, PNG now has full aeronautical surveillance coverage of the entire PNG FIR above 20,000ft up to Flight Level 600 (60,000 ft), as well as a large area of our airspace below 20,000ft. This is a historic milestone for NiuSky Pacific Limited and PNG as a whole.

**“NSPL deployed Aireon's space-based ADS-B service to solve constraints particularly with ground-based systems,” said Captain Ted Pakii, CEO and Managing Director, NSPL. “This data has certainly been welcomed by our air traffic controllers, as it provides airspace-wide real time surveillance. I am pleased that within the next few months, we will be migrating away from problematic local telecommunications lines to ICAO's CRV Network. We will have an incredible amount of reliability and data speed, solving many of our previous challenges.”**

NSPL MD/CEO Capt. Pakii & Aireon Vice President of Customer Affairs, Peter Cabooter at the launch of the partnership on Space-based Aviation Surveillance Technology.

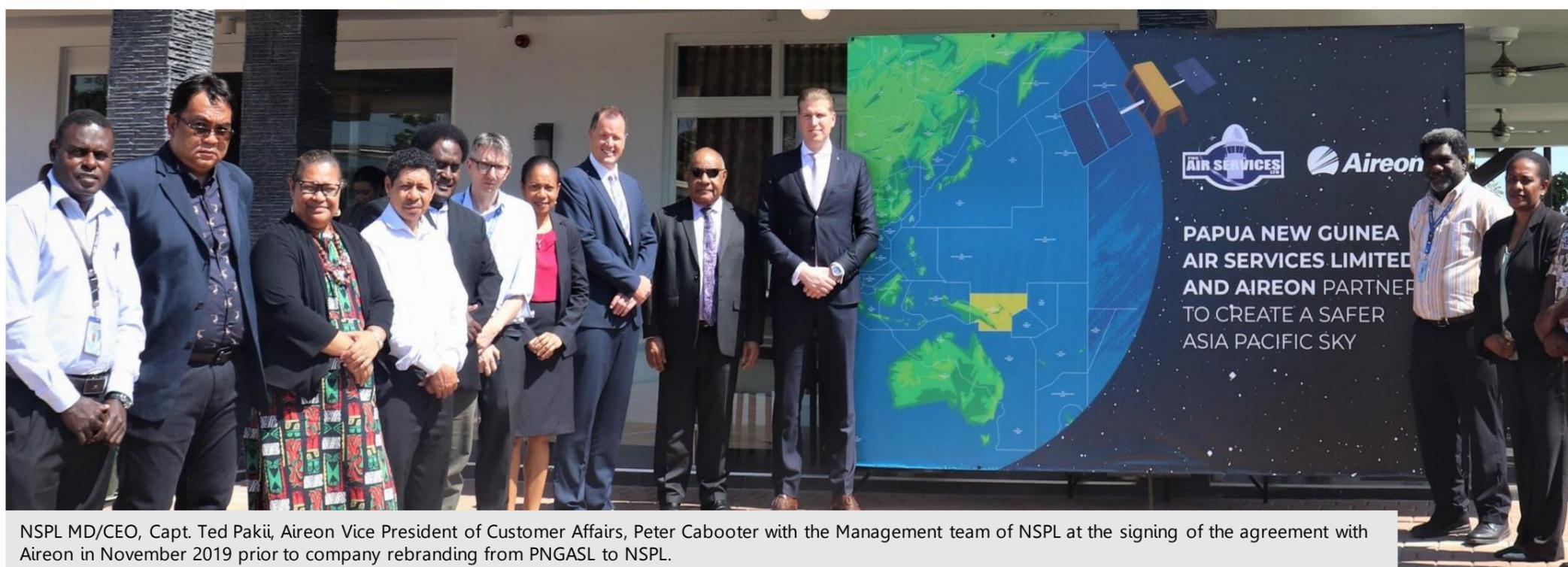


### About NiuSky Pacific Limited

NiuSky Pacific Limited is a State Aviation Enterprise (SAE) that was registered as a company in 2007 but started its operation in April 2008. Its primary business is to provide Air Navigation Services to the domestic and international air operators who use PNG airspace, with the vision to be a leading Air Navigation Service Provider within the region and beyond. <https://www.niuskypacific.com.pg/>.

### About Aireon LLC

Aireon operates the first ever, space-based air traffic surveillance system for Automatic Dependent Surveillance-Broadcast (ADS-B) equipped aircraft throughout the entire globe. Aireon harnesses next-generation aviation surveillance technologies that were formerly ground-based and extends their reach throughout the world to significantly improve efficiency, enhance safety, reduce emissions and provide cost saving benefits to all stakeholders. Aireon's high-fidelity, low-latency surveillance data is available for various applications, allowing aerospace industry partners access to revolutionary data capabilities that enhance asset tracking, aircraft situational awareness and decision support analytical tools. In partnership with leading ANSPs from around the world, like NAV CANADA, Enav, NATS, the Irish Aviation Authority (IAA) and Naviar, as well as Iridium Communications, Aireon provides global, real-time, space-based aircraft data for enhanced air traffic surveillance, innovation and analytics. For more information, please visit [www.aireon.com](http://www.aireon.com).



NSPL MD/CEO, Capt. Ted Pakii, Aireon Vice President of Customer Affairs, Peter Cabooter with the Management team of NSPL at the signing of the agreement with Aireon in November 2019 prior to company rebranding from PNGASL to NSPL.