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SILKAIR GETS APPROVAL TO CONDUCT RNP AR OPERATIONS TO TRIBHUVAN INTERNATIONAL AIRPORT



The Civil Aviation Authority of Singapore (CAAS) granted approval to SilkAir to conduct RNP AR operations to Tribhuvan International Airport after a successful validation flight on 5 December 2014. *Photo courtesy of SilkAir*.

In a move to increase operational efficiency and reduce fuel consumption, SilkAir, the fullservice regional wing of Singapore Airlines, has partnered with Boeing to implement new, highly precise GPS airport approaches called Required Navigation Performance – Authorization Required (RNP AR) procedures into their operations. These procedures use GPS technology to avoid challenging terrain at Kathmandu Tribhuvan International Airport, and provide more precise and stable approaches to the landing runway.

Explaining that the technology would lead to improvements in operational safety, efficiency and reliability, Capt. S. L. Leong, SilkAir, VP Flight Operations said: "The RNP AR approach

enables us to utilise the aircraft's enhanced technology to fly an accurate curved trajectory into Tribhuvan International Airport, while the smoother descent profile and reduced pilot workload results in several safety enhancements."

Located in difficult Nepali terrain, the Tribhuvan International Airport has proved a challenge for pilots manoeuvring the landing approach of aircraft. Silkair planes travelling to Tribhuvan International Airport will be able to precisely fly narrower predefined flight corridors without relying on ground-based navigation stations. Most airports around the world still rely on conventional navigation stations and ground-based radar technology, which require more separation distance with terrain and between airplanes as they land and take off. This results in less efficient flight paths and fuel usage.

"RNP AR procedures are complex operations. This significant achievement demonstrates the high level of technical competence of all parties involved," said Tan Kah Han, Director of Airworthiness/Flight Operations for CAAS. "The RNP AR navigation procedures make effective use of technology to enhance safety, save fuel and reduce carbon emissions. It is also in line with the International Civil Aviation Organization (ICAO)'s push for States to implement Performance Based Navigation (PBN). This will provide the means for flexible routes and terminal procedures while increasing the safety and efficiency of regional and national airspace systems. CAAS remains committed to work with our airlines on such initiatives that will optimize their operations." Mr Tan added.