Flight Procedure Design Quality Assurance Webinar

26 – 30 October 2020

Introduction

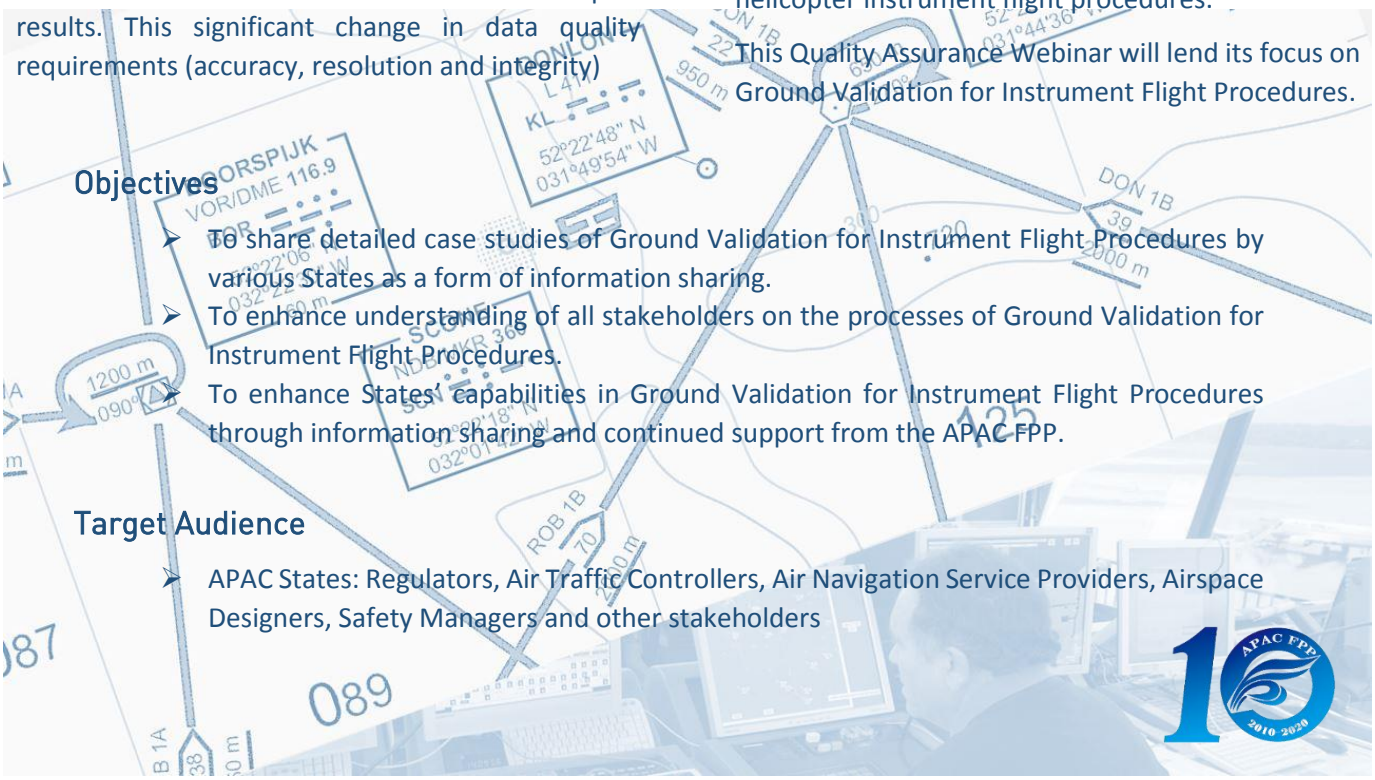
The International Civil Aviation Organization (ICAO) is charged with the duty of promoting the safety, efficiency and economy of international air transportation. The instrument flight procedure (IFP) is an essential component of the aviation system. Every day and during every flight, thousands of aircraft around the world are flying instrument departure, arrival or approach procedures to airports in every country. The safety and quality of these procedures is often taken for granted by aviation professionals. The flying public assume that they will get to their destination safely, and for the most part, do not even realize that IFPs exist. Flight procedures are such an integral part of everyday flight operations that their quality cannot be left to chance. Every State's Air Navigation Services Safety Management System must give consideration to this critical element of the system.

Instrument flight procedures based on conventional ground-based navigation aids have always necessitated a high level of quality control. However, with the implementation of area navigation and associated airborne database navigation systems, even small errors in data could lead to catastrophic results. This significant change in data quality requirements (accuracy, resolution and integrity) has led to the requirement for a systemic quality assurance process (often part of a State Safety Management System). The Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume II, requires that the State take measures to "control" the quality of the processes associated with the construction of instrument flight procedures.

Data quality management, procedure designer training, and validation of software are all integral elements of a quality assurance system. As such the safety and efficiency of these procedures are important, and the development of these procedures should be subject to a quality assurance system.

The objective of conducting validation is to ensure safety, data accuracy and integrity and flyability of the instrument flight procedure through a qualitative assessment of the procedure design including obstacle, terrain and navigation data, and provide an assessment of the flyability of the procedure so as to ensure a proper standard for all publications. The validation process applies to fixed-wing and helicopter instrument flight procedures.

This Quality Assurance Webinar will lend its focus on Ground Validation for Instrument Flight Procedures.



Objectives

- To share detailed case studies of Ground Validation for Instrument Flight Procedures by various States as a form of information sharing.
- To enhance understanding of all stakeholders on the processes of Ground Validation for Instrument Flight Procedures.
- To enhance States' capabilities in Ground Validation for Instrument Flight Procedures through information sharing and continued support from the APAC FPP.

Target Audience

- APAC States: Regulators, Air Traffic Controllers, Air Navigation Service Providers, Airspace Designers, Safety Managers and other stakeholders