LOC 1 Progress Report

Presented August, 2015

7th APRAST Meeting

Bangkok, Thailand

Background

* As discussed and agreed to at the 3rd APRAST meeting, I had floated an idea for a SOP Focus Group to be formed.
* This Group will be charged with determining a common approach to the issue of SOPs instead of LOC-I, CFIT and RS coming out with 3 Model ACs on SOPs respectively.
* Better alignment and less confusion for implementation by States with 1 AC.
* However, at the APRAST 5 meeting, RS WG deemed that Runway Safety SOP was inappropriate to be included into this common AC.

Current Status

- Took a re-look at the COSCAP-issued AC (Advisory Circular) **CSEA – 002A** on SOPs that was issued in March 2006.
- Used this COSCAP AC as starting point.
- Reviewed this AC in its entirety.
- Included LOC and CFIT SOPs into this AC as Appendices.
- Appendix 6 for LOC and Appendix 7 for CFIT.
- The new draft AC (**CSEA – 002B**) had been ready since APRAST 5 and was supposedly to be submitted to the RASG in November 2014.
- Will be put up to the forthcoming RASG.

Cover Page of the Model Advisory Circular

RASG-APAC

MODEL ADVISORY CIRCULAR FOR AIR OPERATORS

STANDARD OPERATING PROCEDURES FOR FLIGHT DECK CREWMEMBERS

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NOTE

This Model Advisory Circular has been prepared under the authority of the Regional Aviation Safety Group – Asia and Pacific Regions (RASG-APAC)

National civil aviation administrations should consider this Model Advisory Circular when developing safety-related information and guidance for their own aviation industry.

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Contents of the Model Advisory Circular

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LOSS OF CONTROL IN-FLIGHT (LOC-I)

Example

GUIDANCE ON DEVELOPING SOPS TO PREVENT LOSS OF CONTROL IN-FLIGHT (LOC-I)

Objective

This appendix aims to provide guidance to operators in the area of developing SOPs aimed at preventing LOC-I. It is premised upon:

- The knowledge of in-flight conditions that may eventuate into a LOC-I situation.
- Effective flight path management and consequently the avoidance of LOC-I situations through early recognition of cues that typically precede such scenarios.
- Standardised recovery techniques from LOC-I situations.

Background

A Loss of Control (LOC) is the result of an aircraft operating in a flight regime beyond that of the normal flight envelope, usually, but not always at a high rate, thereby introducing an element of surprise for the flight crew involved. This is more commonly referred to as the "startle effect," a physiological situation where pilots may over-react/control, in response to a sudden alert or warning (FSF, 2013).

Typically, LOC-I scenarios are not generic and may be induced by a number of different factors either distinctly or in combination. For example:

- Environmental: Mountain waves, severe turbulence, windshear and icing.
- Human factors: Spatial disorientation, fatigue, poor situational awareness and incapacitation.
- Technological: Malfunctioning flight control systems/instruments, automation failure/mismanagement, availability of flight-envelope protection features.
- Organisational: deficiencies in policies, procedures and training.

CONTROLLED FLIGHT INTO TERRAIN (CFIT)

Introduction

The risk of CFIT must be effectively minimized at an organizational, individual and operational level by the application of sound risk management principles.

An organization should establish or provide:

- A positive learning safety culture supported at the highest levels of management
- CFIT hazard awareness training-including departure and destination hazard identification
- Flight training and checking program which focusses on CFIT risk mitigation
- A route and airport qualification program for the flight crew appropriate to the routes being flown
- Flight crew experience and pairing policies appropriate to the routes being flown
- A Fatigue Risk Management System (FRMS)
- Positive interaction with Air Navigation Service Providers to understand their service capabilities and limitations - such as minimum vector altitude, terrain masking, Minimum Safe Altitude Warning (MSAW) capability
- Aircraft equipment appropriate to the routes being flown
- Tailored (customised) approach charts to their flight crew which clearly identify:
  - that a particular instrument approach procedure is approved for use
  - the DA/H to be used by the flight crew prior to the application of corrections
- A non- punitive incident reporting program
- A non-punitive missed approach / diversion policy

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Questions

Thank You