FIJI AERONAUTICAL INFORMATION CIRCULAR

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OPS/ATC

TRAINING OF FLIGHT CREW IN ALAR AND CFIT PREVENTION

1. Background

1.1 Accident statistics indicate that over half of all accidents happen during approach and landing phases of flight. In addition, controlled flight into terrain (CFIT) is the leading cause of commercial aircraft fatalities. Of the total hull lost accidents to large commercial jets in 2003, seven (7) were CFIT and eleven (11) were Approach and Landing Accidents (ALAs). The rate of CFIT accidents has been substantially reduced by the installation of Ground Proximity Warning System (GPWS), and more recently, Terrain Avoidance Warning System (TAWS) commonly known as Enhanced GPWS on transport category airplanes. However, not all Air Operator aeroplanes are required to have TAWS equipment installed even though there has been an average of five (5) CFIT accidents a year for the past ten (10) years.

1.2 Worldwide accident data demonstrate that pilots require improved training in prevention of Approach and Landing Accidents (ALA) and CFIT accidents in general, and in performance of the ground proximity escape manoeuvre in particular.

1.3 The Approach and Landing Accident and CFIT training programme is primarily directed toward two aspects of the ALA/CFIT problem: AVOIDANCE and ESCAPE. **The most important goal for any flight crew is to maintain vertical and horizontal situational awareness in relation to the ground, water, and obstacles.** When this is not accomplished and the potential for impact with the ground, water, or obstacles is imminent, the proper escape manoeuvre must be used to improve the chance of surviving..

2. Purpose

2.1 The purpose of this AIC is to assist Operators in developing appropriate standards to ensure Flight Crew receive initial and recurrent Approach and Landing Accidents (ALA) and CFIT prevention training.

2.2 This AIC is developed to comply with the decisions of the COSCAP-South Asia Steering Committee taken at its 13th Meeting (2011).

2.3 This AIC is also designed to advise air operators to conduct ALAR and CFIT training and to advise of sources of information that are available for the provisions of this training.

3.   CFIT Training Programme

3.1   The CFIT training programme can be structured to stand alone, but it may also be integrated into existing initial, transition, and recurrent training and check programs. The ground-training programme should be designed to improve awareness by increasing the flight crew's ability to recognize and avoid impending CFIT situations. The CFIT simulator training programme should be designed to apply this knowledge, as well as develop proficiency in an escape manoeuvre that must be used as a last resort for survival. Air Operators should provide this training during initial/transition training and as part of recurrent training.

3.2   The objectives of the CFIT Training Programme are to provide the pilot with the ability to:

- Recognize the factors that may lead to CFIT accidents and incidents.
- Know the prevention strategies that will ensure a safe flight.
- Improve situational awareness in order to avoid CFIT.
- Learn an escape manoeuvre and techniques designed to enhance the possibility of survival.

3.3   A "Controlled Flight into Terrain Education and Training Aid" has been widely distributed by ICAO, manufacturers, CAAs and DGCA to many air operators. More recently the Flight Safety Foundation (FSF) has produced the Approach and Landing Accident Reduction (ALAR) Tool Kit, which in addition to information concerning ALAR, includes an updated and more user-friendly version of the Controlled Flight into Terrain Education and Training Aid.

3.4   The CFIT Training material contained in the FSF ALAR Tool Kit includes detailed information concerning CFIT, information for the avoidance of CFIT, and CFIT training programme material and a safety alert containing the ground proximity escape manoeuvre recommended for many of the specific airplane makes and models flown by most air operators. A generic ground proximity escape manoeuvre is provided for use in respect to airplanes that do not have a specific manoeuvre. It is recommended that air operators utilize the FSF ALAR Tool Kit as a basis for developing their training programme.

4.   ALAR Training Programme

4.1   The ALAR training programme should be integrated into existing initial, transition, and recurrent training and check programs. The ground training programme should be designed to improve awareness by increasing the flight crew's ability to recognize and avoid situations to help prevent approach and landing accidents (ALAs). Air operators should provide this training during initial / transition training and at least once every two years as part of recurrent training.

4.2 The objectives of the ALAR Training Programme are to provide the pilot with the ability to:

- Be aware of the high risk involved in the approach and landing phase of flight;
- Know the available interventions to address this risk (e.g. SOPs, stabilized approach criteria, no fault go around policy, etc.);
- Increase awareness of ALA pre-cursors;
- Learn and apply risk reduction interventions to reduce the risk of approach and landing accidents.

4.3 The Flight Safety Foundation (FSF) has made available the Approach and Landing Accident Reduction (ALAR) Tool Kit (https://www.skybrary.aero/index.php/Flight_Safety_Foundation_ALAR_Toolkit), which includes a variety of information to help prevent approach and landing accidents. In addition to providing training material to help prevent ALAs, there are many other tools and educational material contained in the FSF Tool Kit that air operators may wish to utilize to reduce their risk of approach and landing accidents.