AIRWORTHINESS NOTICE

SUBJECT: GROUND PROXIMITY WARNING SYSTEM (GPWS)  
NUMBER: GCAA/AWN-001  
REV. STATUS: Original  
DATE: 15th November, 2016

AEROPLANES REQUIRED TO BE EQUIPPED WITH GROUND PROXIMITY WARNING SYSTEM (GPWS) – COMMERCIAL AIR TRANSPORT

1. INTRODUCTION

11 The Guyana Civil Aviation (Air Navigation) Regulations (GCARs) through the medium of Airworthiness Notices make provision for the adoption of airworthiness matters and procedural requirements established by the Annexes of the International Civil Aviation Organisation (ICAO) or other internationally recognised Standards which may not have been established by civil aviation regulations of Guyana. Consequently, pursuant to the authority enshrined in Regulation 85 of the GCARs, this Airworthiness Notice (AWN) is published by the Director General of Civil Aviation (DGCA) in his effort to prevent aviation fatalities caused by "Controlled Flight Into Terrain" (CFIT).

12 Controlled Flight into Terrain (CFIT) occurs when an airworthy aircraft under the control of the flight crew is flown unintentionally into terrain, obstacles or water, usually with no prior awareness by the crew. This type of accident can occur during most phases of flight, but CFIT is more common during the approach-and-landing phase, which begins when an airworthy aircraft under the control of the flight crew descends below 5,000 feet above ground level (AGL) with the intention to conduct an approach and ends when the landing is complete or the flight crew flies the aircraft above 5,000 feet AGL en-route to another airport.

13 The purpose of this Airworthiness Notice is to add to the requirements of the Guyana Aviation Requirements (GARs) Sub-part 7.1.6.5., for aircraft equipment capable of giving warning to the pilot of potentially hazardous proximity of ground or water, such as, Ground Proximity Warning System.

2. REQUIREMENTS

21 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5700 kg or authorised to carry more than nine (9) passengers shall be equipped with a Ground Proximity Warning System.

22 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15,000 kg or authorised to carry more than thirty (30) passengers shall be equipped with a Ground Proximity Warning System which has a forward looking terrain avoidance function.
All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5,700 kg or authorised to carry more than nine (9) passengers, for which the Individual certificate of airworthiness is first issued on or after 1st January, 2004, shall be equipped with a Ground Proximity Warning System which has a forward looking terrain avoidance function.

From 1st January, 2007 all piston-engined aeroplanes of a maximum certificated take-off mass in excess of 5,700 kg or authorised to carry more than nine (9) passengers shall be equipped with a Ground Proximity Warning System which provides the warnings in 2.6 a. and c., warning of unsafe terrain clearance and a forward looking terrain avoidance function.

A Ground Proximity Warning System shall provide automatically a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.

A Ground Proximity Warning System shall provide, unless otherwise specified herein, warnings of the following circumstances:
   a. excessive descent rate;
   b. excessive terrain closure rate;
   c. excessive altitude loss after take-off or go-around;
   d. unsafe terrain clearance while not in landing configuration;
      1) gear not locked down;
      2) flaps not in a landing position, and
   e. excessive descent below the instrument glide path.

3. **COMPLIANCE**

All aeroplanes on the Guyana register and issued with its Certificate of Airworthiness in the Transport Category (Passenger and/or Cargo) and Aerial Work shall comply to the requirements to paragraph 2.1 to 2.6 of this Airworthiness Notice, as applicable.

Approved by:

Lt. Col (Ret’d.) Egbert Field
Director General of Civil Aviation
Guyana Civil Aviation Authority