

Model Regulation on Ground Proximity Warning System (GPWS)

Citation and commencement

1. - (1) These Regulations are made under *[insert primary legislation]*.
- (2) These Regulations may be cited as *[insert name of regulations]* and shall come into force on *[date]*.

Applicability

2. - (1) These Regulations shall apply to all operators engaged in international commercial air transport operations or international general aviation operations.

Definitions

3. - (1) In these Regulations, unless the context otherwise requires –
 - “**aeroplane**” means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;
 - “**aircraft**” means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface;
 - “**commercial air transport operation**” means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;
 - “**general aviation operation**” means an aircraft operation other than a commercial air transport operation or an aerial work operation;
 - “**Operations manual**” means a manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties;
 - “**operator**” means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation.

Aeroplanes to be equipped with ground proximity warning system (GPWS)

4. - (1) No operator shall operate, for the purpose of commercial air transport, a turbine-engined aeroplane of a maximum certificated take-off mass in excess of 5,700kg or that is authorised to carry more than nine passengers unless that aeroplane is equipped with a ground proximity warning system which has a forward looking terrain avoidance function and that meets the requirements in sub-paragraphs (5) and (6).
- (2) No operator shall operate, for the purpose of commercial air transport, a piston-engined aeroplane of a maximum certificated take-off mass in excess of 5,700kg or that is authorised to carry more than nine passengers, unless that aeroplane is equipped with a ground proximity warning system which provides the warnings specified in sub-paragraphs (6)(a) and (6)(c), a warning of unsafe terrain clearance and a forward looking terrain avoidance function.
- (3) No operator shall operate, for the purpose of general aviation, a turbine-engined aeroplane –

- (a) of a maximum certificated take-off mass in excess of 5,700kg; or
 - (b) that is authorised to carry more than nine passengersfor which the certificate of airworthiness was first issued on or before 1 January 2011 unless that aeroplane is equipped with a ground proximity warning system which has a forward looking terrain avoidance function and that meets the requirements in sub-paragraph (7).
- (4) No operator shall operate, for the purpose of general aviation, a turbine-engined aeroplane –
 - (a) of a maximum certificated take-off mass in excess of 5,700kg; or
 - (b) that is authorised to carry more than nine passengersfor which the certificate of airworthiness was first issued after 1 January 2011 unless that aeroplane is equipped with a ground proximity warning system which has a forward looking terrain avoidance function and that meets the requirements in sub-paragraph (6).
- (5) A ground proximity warning system referred to in sub-paragraphs (1), (2), (3) and (4) 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.
- (6) A ground proximity warning system referred to in sub-paragraphs (1), (2) and (4) shall provide, unless otherwise specified in this paragraph, 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:
 - (i) gear not locked down
 - (ii) flaps not in a landing position; and
 - (e) excessive descent below the instrument glide path.
- (7) A ground proximity warning system referred to in sub-paragraph (3) shall provide, at a minimum, warnings of at least the following circumstances:
 - (a) excessive descent rate
 - (b) excessive altitude loss after take-off or go-around; and
 - (c) unsafe terrain clearance
- (8) The Operations Manual or Airplane Flight Manual, or both, maintained by the operator shall contain instructions and training requirements, including appropriate procedures for:
 - (a) the use of the ground proximity warning system; and
 - (b) proper flight crew reaction in response to the ground proximity warning system audio and visual warnings.