



Civil Aviation Rules

Part 1, Initial Issue

Definitions and Abbreviations

These rules are made by the Minister of Transport under section 52 of the Civil Aviation Act 2023 after having certified the rules in accordance with clause 8 of Schedule 1 of that Act.

Made at Wellington on

This 13th day of December 2024

A handwritten signature in black ink, appearing to read 'Simeon Brown'.

by Hon Simeon Brown

Minister of Transport

Rule Objective

The objective of Part 1 is to facilitate the interpretation of the Civil Aviation Rules by setting out the definitions and abbreviations used in the Rules.

Part 1 includes —

- Definitions of specific terms used in the Rule Parts
- Abbreviations used in the Rule Parts

Extent of Consultation

This initial issue of Civil Aviation Rules Part 91 under the Civil Aviation Act 2023 includes proposed amendments to the version of Part 91 made under the Civil Aviation Act 1990. These are included under clause 8(5) of Schedule 1 of the 2023 Act, the requirements of section 34(1) of the former Act relating to notification and consultation being complied with as follows.

A Notice of Proposed Rulemaking, NPRM 23-01, containing the Assorted Issues 2023 proposal was originally issued for public consultation under Docket 24/CAR/01 on 13 February 2024.

The NPRM was published on the CAA web site and mailed to identified stakeholders including representative organisations who were considered likely to have an interest in the proposal.

A period of 40 days was allowed for comment on the proposed rule.

On reviewing the submissions received on NPRM 23-01, it was found that the preamble of NPRM 23-01 contained an administrative error relating to the criteria for an issue to be included in the Assorted Issues proposal. This resulted in a second round of public consultation for NPRM 23-01. The NPRM was published on the CAA web site on 1 July 2024. A period of 40 days was allowed for comment on the proposal.

Effective date of rule

Part 1 comes into force on 5 April 2025

Administering Agency

The administering agency responsible for administering these rules is the Civil Aviation Authority of New Zealand.

Availability of rules

Civil Aviation Rules are available from–

CAA website: <http://www.aviation.govt.nz/>

Freephone: 0800 GET RULES (0800 438 785)

List of rules

1.1	General definitions	5
1.3	Abbreviations	60

1.1 General definitions

In rules made under the Act, unless the context otherwise requires—

2D instrument approach operation means an approach and landing using lateral navigation guidance only:

3D instrument approach operation means an approach and landing using both lateral and vertical navigation guidance:

Accelerate-stop distance available means the length of the take-off run available plus the length of any stopway:

Accident has the meaning given to it in section 6 of the Act

Accredited medical conclusion has the meaning given to it in section 5 of the Act:

Act means the Civil Aviation Act 2023:

Adequate aerodrome means an aerodrome where the applicable requirements for the aerodrome and runway prescribed in rule 121.71 are met for the particular aeroplane being operated except that, if the aerodrome is designated as an en-route alternate aerodrome the rescue and fire fighting equipment must be at least category 4 and must be available, with at least 30 minutes prior notification, at the expected time of arrival of the aeroplane:

ADS-B OUT means a function on an aircraft that periodically broadcasts its state vector (identity position and velocity) and other information derived from on-board systems in a format suitable for ADS-B receivers:

ADS-B system means a GNSS position source and a compatible Mode S Extended Squitter 1090Mhz ADS-B OUT transponder, or any other suitable transponder determined by the Director as specified in a notice referred to in rule 91.258(a)(6):

Adventure aviation operation means the following operations for the carriage of passengers by air for hire or reward where the object of the operation is for the passenger's recreational experience of participating in the flight, or engaging in the aerial operation—

- (1) an A to A flight in an aeroplane or helicopter issued with a *standard category* airworthiness certificate conducting formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres such as steep climbs, steep descents, and steep turns:
- (2) an A to A flight (including an interim water landing for amphibious aircraft) in an aircraft issued with an appropriate *special category-primary, special category-LSA, or special category-limited* airworthiness certificate including formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres such as steep climbs, steep descents, and steep turns:
- (3) an A to A flight in a Class 2 microlight aircraft:
- (4) a flight in a hot air balloon:
- (5) a flight in a glider:
- (6) a parachute-drop aircraft operation that is not conducted under the authority of an air operator certificate issued by the Director under the Act and Part 119:
- (7) a tandem parachute descent operation:
- (8) a tandem hang glider or paraglider flight:

Aerial spraying means dispensing from an aircraft—

- (1) a liquid agricultural chemical; or
- (2) any other liquid substance intended for plant nourishment, soil treatment, or propagation of plant life:

Aerial topdressing means dispensing from an aircraft—

- (1) a dry agricultural chemical; or
- (2) any other dry substance intended for plant nourishment, soil treatment, or propagation of plant life:

Aerial vertebrate toxic agent means dispensing from an aircraft toxic and non-toxic bait intended for the extermination of targeted vertebrate pests:

Aerobatic flight means—

- (1) an intentional manoeuvre in which the aircraft is in sustained inverted flight or is rolled from upright to inverted or from inverted to upright position; or
- (2) manoeuvres such as rolls, loops, spins, upward vertical flight culminating in a stall turn, hammerhead or whip stall, or a combination of such manoeuvres:

Aerodrome has the meaning given to it in section 5 of the Act:

Aerodrome control service has the meaning given to it in section 5 of the Act:

Aerodrome control tower means a unit established to provide ATC service to aerodrome traffic:

Aerodrome flight information service has the meaning given to it in section 5 of the Act:

Aerodrome Frequency Response Unit means a ground based VHF radio, which on receipt of a modulated VHF transmission from an aircraft on the appropriate frequency, automatically transmits either a voice or a tone response to confirm the pilot's radio frequency selection:

Aerodrome traffic has the meaning given to it in section 5 of the Act:

Aerodrome traffic circuit has the meaning given to it in section 5 of the Act:

Aeronautical Data means data used for an aeronautical application including navigation, flight planning, flight simulators, and terrain awareness, which comprises navigation data and terrain and obstacle data:

Aeronautical facility means—

- (1) the various types of communication systems used for an aeronautical broadcasting service, or an aeronautical fixed service, that supports IFR flight or an air traffic service; or
- (2) the ground elements of the various types of communication systems used for an aeronautical mobile service; or
- (3) the various types of radio navigation aids used for the aeronautical radio navigation service; or
- (4) any other type of ground-based telecommunication system that supports IFR flight or an air traffic service; or
- (5) the various types of ground based telecommunication systems that operate in the aeronautical mobile radio frequency bands and are used to provide basic weather information, local aerodrome information, or flight following services:

Aeronautical information means information resulting from the assembly, analysis and formatting of aeronautical data:

Aeronautical Information Circular means a notice containing information that—

- (1) does not qualify for the origination of a NOTAM or for inclusion in the AIPNZ; and
- (2) relates to flight safety, air navigation, technical, administrative or legislative matters:

Aeronautical information publication means a publication issued by, or with the authority of, a State and containing aeronautical information of a lasting character essential to air navigation:

Aeronautical Information Publication New Zealand means the AIP for New Zealand published for the Authority by the holder of the AIS certificate for the AIP service:

Aeronautical information service means any of the following services that distribute aeronautical information essential for the safety, regularity and efficiency of air navigation—

- (1) AIP service; or
- (2) NOTAM service; or
- (3) Pre-flight information service:

Aeronautical mobile service means a mobile service for communication between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate, and emergency position-indicating radiobeacon stations may also participate on designated distress and emergency frequencies:

Aeronautical product has the meaning given to it in section 5 of the Act:

Aeronautical station means a land station in the aeronautical mobile service:

Aeronautical telecommunication service means—

- (1) a telecommunication service provided to support the following services as they are defined in ICAO Annex 10, Volume II, Chapter 1—
 - (i) an aeronautical broadcasting service:
 - (ii) an aeronautical fixed service:
 - (iii) an aeronautical mobile service:
 - (iv) an aeronautical radio navigation service;
- (1A) any telecommunication service which processes or displays air traffic control data, including aviation meteorological data, for use by an ATS provider under Part 172; or
- (2) any other telecommunication service provided specifically to support the New Zealand air navigation system:

Aeronautical telecommunication service certificate means a certificate issued by the Director in accordance with Part 171 that authorises the holder to provide aeronautical telecommunication services and operate facilities that support IFR flight or an air traffic service:

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:

Aeroplane movement means an aeroplane take-off or landing:

Agricultural aircraft operation means the operation of an aircraft on a single flight, or on a series of flights, including transit flights from a loading area to and from a treatment area, for the following purposes:

- (1) aerial spraying:
- (2) aerial topdressing:
- (3) aerial VTA:
- (4) engaging in dispensing activities affecting agriculture, horticulture, or forest preservation:
- (5) dropping farm supplies on farms in rural areas or delivering farm materials to farms in rural areas:
- (6) surveying agricultural, forest, or water areas at a height of less than 500 feet above terrain:
- (7) feeding or transferring livestock on farms in rural areas:
- (8) the reconnaissance of the proposed treatment area for the types of operation referred to in paragraphs (1) to (7):

Agricultural chemical means any substance or mixture of substances intended for—

- (1) preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds or other forms of plant, animal life or viruses (except viruses on or in living man or other animals) which have been declared by the appropriate

authority to be a national or regional pest or noxious plant; or

- (2) use as a plant regulator, defoliant or desiccant:

AIRAC means aeronautical information regulation and control, signifying a system aimed at advance notification, based on common effective dates, of circumstances that require significant changes in operating practices:

AIP Amendment means permanent changes to the information contained in the AIPNZ:

AIP service means a service for the publication of the AIPNZ, AIP Amendments, AIP Supplements and aeronautical information circulars:

AIP Supplement means temporary changes to the information contained in the AIPNZ that are published by means of special pages:

Aircraft means any machine that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth:

Aircraft category and category of aircraft means any one of the following classes of aircraft: aeroplane, balloon, glider, hang glider, helicopter, or microlight:

Aircraft Emergency Location System means a system that—

- (1) is installed in an aircraft; and
- (2) automatically broadcasts the aircraft location to search and rescue services in the event of a crash; and
- (3) is approved by the Director under rule 91.529(ab):

Aircraft engine means an engine that is used or intended to be used for propelling aircraft, and includes turbo-superchargers, appurtenances and accessories necessary for its functioning, but does not include propellers:

Aircraft radio station means—

- (1) all installed radio equipment including antennae, indicators, controls, interconnecting cabling, and wiring into the aircraft electrical system, which are required in order to perform the intended function; and
- (2) all portable emergency radio equipment required to be carried by Part 91:

Air operation means an air transport operation, a commercial transport operation, or an adventure aviation operation:

Air operator means the holder of—

- (1) an air operator certificate granted under section 75 of the Act and in accordance with Part 119; or
- (2) a foreign air operator certificate granted under section 75 of the Act and in accordance with Part 129; or
- (3) an Australian air operator certificate with ANZA privileges:

Air operator security programme means a programme to safeguard an air operator's passengers, crew, ground personnel, aircraft, and facilities from acts of unlawful interference:

Airport identity card means an airport identity card issued or approved under this Part:

Airship means a power-driven lighter-than-air aircraft:

Airside security area means an area declared by the Director under section 121 of the Act:

Air traffic has the meaning given to it in section 5 of the Act:

Air traffic advisory service means a service provided within class F airspace to ensure separation, as far as practical, between aircraft that are operating on IFR flight plans:

Air traffic control service has the meaning given to it in section 5 of the Act:

Air traffic control unit and ATC unit means a unit for providing any air traffic control service, and includes either an area control centre, an approach control office, or an aerodrome control tower:

Air traffic service has the meaning given to it in section 5 of the Act:

Air traffic services unit means a unit providing an air traffic service, which may include an air traffic control unit and a flight information centre:

Air transport operation means an operation for the carriage of passengers or goods by air for hire or reward except—

- (1) a commercial transport operation:
- (2) an adventure aviation operation:
- (3) a helicopter external load operation under Part 133:
- (4) an agricultural aircraft operation under Part 137:
- (5) an introductory flight carried out under rule 91.227H:
- (6) a cost sharing flight under rule 91.227B.

Airworthiness certificate means—

- (1) for a New Zealand registered aircraft, an airworthiness certificate issued by the Director under Part 21, Subpart H; and
- (2) for a foreign registered aircraft, an airworthiness certificate issued by the competent authority of the State of registry:

Airworthiness data means any information necessary to ensure an aeronautical product or a product or component can be maintained in an airworthy condition:

Airworthiness directive means a mandatory airworthiness requirement that specifies modifications, inspections, conditions, or limitations to be applied to an aircraft or aeronautical product to ensure continued safe operating conditions:

Airworthy condition means the condition of an aircraft, including its components, fuel, and other materials and substances essential to the manufacture and operation of the aircraft, that complies with all the requirements prescribed by the *Civil Aviation Rules* relating to design, manufacture, maintenance, modification, repair, and safety:

Alerting service has the meaning given to it in section 5 of the Act:

Alternate aerodrome means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or land at the aerodrome of intended landing:

Alternative means of navigation means a navigational system that, for a given operation or phase of flight, will enable the continued safe navigation and landing of the aircraft if the primary means of navigation fails:

Altimeter setting (QNH) means the aerodrome level pressure reduced to mean sea level in accordance with the ICAO Standard Atmosphere, which is specified by a mean sea level pressure of 1013.25 hectopascals, and temperature of 15.0 degrees Celsius with a lapse rate of 6.5 degrees Celsius per 1000 M and is the altimeter sub scale setting to obtain the elevation when on the ground:

Altitude means the vertical distance of a level, a point, or an object considered as a point, measured from mean sea level:

Amateur built aircraft means an aircraft that is eligible for the issue of a *special category—amateur-built* airworthiness certificate under Subpart H of Part 21; and—

- (1) the aircraft's amateur constructor has built the major portion of the aircraft for the constructor's own education or recreation; or
- (2) the aircraft is a light sport aircraft designated by the

manufacturer as an experimental – light sport aircraft:

Amateur constructor means a person who constructs an aircraft solely for their own education or recreation:

Appliance means any instrument, mechanism, equipment, part, or accessory that is used, or is intended to be used, in operating or controlling an aircraft in flight, or is installed in or attached to the aircraft, that is not part of the airframe, engine, or propeller:

Approach control office means a unit established to provide ATC service to controlled flights arriving at, or departing from, one or more aerodromes:

Approach control service has the meaning given to it in section 5 of the Act:

Appropriate, in relation to a pilot licence or rating, means applicable to the same category of aircraft:

Approved, unless used with reference to another person, means approved in writing by the Director:

Apron means a defined area on a land aerodrome intended to accommodate aircraft for the purpose of loading or unloading passengers or cargo, refuelling, parking, or maintenance:

Apron management service means a service provided to regulate the activities and the movement of aircraft and vehicles on an apron:

Area control centre means a unit established to provide ATC service to controlled flights in control areas under its jurisdiction:

Area control service has the meaning given to it in section 5 of the Act:

Area Navigation means a method of navigation which permits aircraft operation on any desired flight path within the coverage of ground or space-based navigation systems or within the limits of the capability of self-contained navigation systems, or a combination of these:**ATC clearance** means authorisation for an aircraft to proceed under conditions specified by an air traffic control unit:

ATC instruction means a directive issued by ATC for the purpose of requiring a pilot to take a specific action:

ATS surveillance system means variously ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft:

[Note - A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than monopulse SSR.]

ATS unit means a unit established to provide one or more air traffic service:

Auckland Oceanic Flight Information Region means—

- (1) all that airspace, excluding airspace within the New Zealand Flight Information Region, bounded by a line joining
S 30 00 00.0, W 131 00 00.0, S 90 00 00.0, E 00 00 00.0
(South Pole), S 30 00 00.0, E 163 00 00.0,
S 28 00 00 0, E 168 00 00.0, S 25 00 00.0, E 171 25 00.0,
S 25 00 00.0, 180 00 00.0,
S 15 32 45.1, W 175 40 31.2 (Niufo'ou),
S 05 00 00 0, W 171 00 00 0, S 05 00 00 0, W 157 00 00.0,
S 30 00 00.0, W 157 00 00.0, S 30 00 00.0, W 131 00 00.0;
with
- (2) an upper limit of flight level 999; and
- (3) the surface of the earth as the lower limit:

Augmented crew means the crew on an aeroplane when it is comprised of more than the minimum crew required by the aeroplane certification:

Australian AOC with ANZA privileges has the same meaning as in section 3(1) of the Civil Aviation Act 1988 (Aust) and Australian Air Operator's Certificate with ANZA privileges has a corresponding meaning:

Authorised security person has the meaning given to it in section 5 of the Act:

Authority means the Civil Aviation Authority of New Zealand:

Automatic engine data recording system means a system that acquires data from specialised sensors that measure various parameters related to the airworthy condition of an aircraft engine:

Aviation event means an event to be conducted below the minimum safe heights prescribed under Part 91 that is—

- (1) an air show or practice for an air show; or
- (2) an air race or practice for an air race; or
- (3) an aerobatic competition; or
- (4) aerobatic training or practice:

Aviation Security Service has the meaning given in section 5 of the act:

AvSec has the meaning given in section 5 of the act:

AWIB Service means an automatic broadcast of aerodrome and weather information provided specifically for the facilitation of aviation, and for the avoidance of doubt, an AWIB service is not an air traffic service:

Baggage means personal property of passengers or crew carried on an aircraft by agreement with the operator, or personal property of passengers or crew that is intended by passengers or crew to be carried on an aircraft:

Balloon means a non-power-driven lighter-than-air aircraft:

Basic weather report means a verbal comment, in support of aviation, describing any of the following current weather conditions observed at a particular place or airspace:

- (1) wind direction and strength:

- (2) mean sea level air pressure:
- (3) air temperature:
- (4) weather conditions and cloud cover:

Broadcast means a transmission intended to be received by all stations:

Cargo means any property carried on an aircraft other than mail, stores and baggage:

Carry on baggage means baggage and any other item that—

- (1) is carried on to an aircraft by a passenger or crew member with the agreement of the operator; and
- (2) remains in the custody of the passenger or crew member:

Category II precision approach procedure means a precision instrument approach and landing with a decision height lower than 200 feet, but not lower than 100 feet, and a runway visual range not less than 300 m:

Category III precision approach procedure means one of the following precision instrument approaches and landings:

- (1) **Category IIIA:** A precision instrument approach and landing with—
 - (i) a decision height lower than 100 feet or no decision height; and
 - (ii) a runway visual range not less than 175 m:
- (2) **Category IIIB:** A precision instrument approach and landing with—
 - (i) a decision height lower than 50 feet or no decision height; and
 - (ii) a runway visual range less than 175 m but not less than 50 m:

- (3) **Category IIIC:** A precision instrument approach and landing with no decision height and no runway visual range limitations:

Ceiling means the height above ground or water of the base of the lowest layer of cloud below 20 000 feet covering more than half the sky:

Certificated for single pilot operation, in relation to an aircraft, means determined by the State of Registry, during the certification process, to be a type of aircraft that can be operated safely with a minimum crew of one pilot:

Certificated organisation means an organisation issued with a certificate under rules made under the Act:

Civil Aviation Rules means rules made under the Act:

Class 1 microlight aircraft means a microlight aircraft other than a Class 2 microlight aircraft:

Class 2 microlight aircraft means a microlight aircraft designed and equipped to carry 2 persons:

Class 3.1A—Flammable liquid means a liquid that has a flash point of below 23°C and has an initial boiling point (IBP) of a maximum 35°C, and includes petrol based products:

Class 3.1C—Flammable liquid means a liquid that has a flash point at or above 23°C, but at or below 60°C, and includes kerosene based products:

Class 3.1D—Flammable liquid means a liquid that has a flash point of above 60°C, but at or below 93°C, and includes diesel products:

Class B cargo or baggage compartment means a cargo or baggage compartment in which—

- (1) there is sufficient access in flight to enable a crew member to effectively reach any part of the compartment with the contents of a hand fire extinguisher; and

- (2) when the access provisions are being used, no hazardous quantity of smoke, flames, or extinguishing agent, will enter any compartment occupied by the crew or passengers; and
- (3) there is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station:

Clearance limit means the point to which an aircraft is granted an ATC clearance:

Clearway means a defined rectangular area on the ground or water, at the departure end of the runway—

- (1) under the control of the aerodrome operator; or
- (2) with the agreement of the authority controlling the clearway—

selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height:

Command practice means the performance by a co-pilot of the duties and functions of a pilot-in-command during a flight under the supervision of a pilot-in-command designated for the purpose by the operator:

Commercial agricultural aircraft operation means an agricultural aircraft operation for hire or reward:

Commercial transport operation means an operation for the carriage of passengers or goods by air for hire or reward—

- (1) where—
 - (i) each passenger is performing, or undergoing training to perform, a task or duty on the operation; or
 - (ii) the passengers or goods are carried to or from a remote aerodrome—
- (2) except those operations in paragraph (1) that are—

- (i) a helicopter external load operation conducted under Part 133; or
- (ii) an agricultural aircraft operation conducted under Part 137:

Component means any instrument, mechanism, equipment, part, or accessory, including an airframe, aircraft engine, or propeller, that is used, or is intended to be used, in operating or controlling an aircraft in flight, or is installed in or attached to the aircraft, that has a part number or a serial number allocated by the manufacturer, unless the manufacturer has designated such an item as a standard part:

Condition monitored maintenance means a maintenance process that monitors maintenance trends, and relies upon analysis of the operating experience of the whole population of specified items to indicate nascent failures requiring corrective action:

Configuration in relation to an aircraft, means a particular combination of the positions of the movable elements, such as wing flaps or landing gear, which affect the aerodynamic characteristics of the aeroplane:

Configuration, maintenance and procedures standards document means a document approved by the certification authority for the aeroplane specifying the minimum requirements for the aeroplane configuration, including any special inspections, hardware life limits, flight crew procedures, master minimum equipment list constraints, and maintenance practices necessary to establish the suitability of the aeroplane's airframe/engine combination for EDTO:

Congested area in relation to a city, town, or settlement means any area which is substantially in use for residential, industrial, commercial, or recreational purposes:

Consensus standard means, for the purpose of certifying a light sport aircraft, an industry-developed standard that applies to the aircraft design, production, and airworthiness. The standard includes, but is not limited to, standards for aircraft design and performance, required equipment, manufacturer quality assurance systems, production acceptance test procedures, operating instructions, maintenance and inspection procedures, identification and recording of major repairs

and major alterations, and continued airworthiness:

Contaminated, in relation to a runway, means a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors as contained in the AIPNZ:

Contingency fuel means a fuel provision for any of the following:

- (1) en-route winds or temperatures being different from forecast:
- (2) any deviation from the flight planned routes, altitudes or flight levels:
- (3) variations from optimum operating techniques:

Control area means a controlled airspace extending upwards from a specified limit above the earth:

Controlled aerodrome means an aerodrome at which air traffic control service is provided to aerodrome traffic:

Note — the term ‘controlled aerodrome’ indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.

Controlled airspace has the meaning given to it in section 5 of the Act:

Controlled flight has the meaning given to it in section 5 of the Act:

Control system means a system that has the ability to directly change the flight path, attitude, or propulsive force of an aircraft, and includes the flight controls, the engine and propeller controls, the related system controls, and the associated operating mechanisms:

Control zone means a controlled airspace extending upwards from the surface of the earth to a specified limit:

Convention has the meaning given to it in section 5 of the Act:

Conversion instruction means instruction for the purposes of

familiarisation in the operation of aircraft for which a type rating is required; but does not include instruction or supervision of student pilots nor instruction for the purposes of familiarisation in respect of conversion from fixed-wing to rotary-wing aircraft or from rotary-wing to fixed-wing aircraft:

Co-pilot means a licensed pilot, serving in any piloting capacity other than as pilot-in-command; but does not include a pilot receiving flight instruction from a pilot on board the aircraft:

Crew member means a person carried by an aircraft who is—

- (1) assigned by the operator—
 - (i) as a flight crew member or flight attendant to perform a duty associated with the operation of the flight; or
 - (ii) to perform a duty associated with the operation of the aircraft during flight time; or
- (2) a person carried for the sole purpose of—
 - (i) undergoing or giving instruction in the control and navigation of the aircraft; or
 - (ii) undergoing instruction as a flight engineer or flight attendant; or
- (3) authorised by the Director to exercise a function associated with the operation of the aircraft during flight time; or
- (4) a flight examiner; or
- (5) a person carried to perform a specified function necessary for the purpose of an operation under circumstances and conditions determined by the Director as specified in a notice under rule 91.227E

Critical performance parameter means a performance parameter that has a direct effect on the operational integrity of an aeronautical facility:

Cross-country flight means a flight which extends more than 25 nautical miles in a straight line distance from the centre of the aerodrome of departure:

Cruising level means a level maintained during a significant portion of a flight:

Current, in respect of a licence, rating, or medical certificate, means the document is valid and the holder of the document has satisfied all recent experience and medical requirements for the exercise of the privileges:

Dangerous goods has the meaning given to it in section 5 of the Act:

Date of manufacture, in relation to a product, means the date that the product inspection records indicate that the product meets its type design:

Day means the hours between—

- (1) the beginning of morning civil twilight, which is when the centre of the rising sun's disc is 6 degrees below the horizon; and
- (2) the end of evening civil twilight, which is when the centre of the setting sun's disc is 6 degrees below the horizon:

Decision altitude means a specified altitude, referenced to mean sea level, in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established:

Decision height means a specified height, referenced to the runway threshold, in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established:

Declaration of security means a declaration made in accordance with the requirements of Part 109 regarding a consignment of cargo or mail:

Declared distance in relation to a runway means any of the following—

take-off run available:

take-off distance available:

accelerate-stop distance available:

landing distance available:

Defect means a change in the state or quality of an aeronautical product, a product, or a component that makes it unfit for its intended purpose and not in an airworthy condition:

Design change means a change to a type design or a change to any other part of a type certificate or type acceptance certificate that if incorporated would require the modification or repair of a product, its components, or an appliance:

Detailed inspection, in respect of a progressive inspection, means a thorough examination of an aircraft and its components, systems and equipment with such disassembly as is necessary and includes the overhaul of a component or system:

Director has the meaning given to it in section 5 of the Act:

Disabled passenger means any passenger whose physical, medical, or mental condition requires individual attention not normally extended to passengers during an air transport operation:

Document means a document in any form, and includes—

- (1) any writing on any material:
- (2) any information recorded or stored by means of any tape recorder, computer, or other device; and any material subsequently derived from information so recorded or stored:
- (3) any book, map, chart, plan, graph, or drawing:

- (4) any photograph, film, negative, tape, or other device in which one or more visual images are embodied so as to be capable (with or without the aid of some other equipment) of being reproduced:

Domestic aerodrome means any aerodrome other than an international aerodrome:

Dry, in relation to a runway, means a runway surface is free of visible moisture and not contaminated within the area intended to be used:

Dual flight instruction means flight instruction provided to a person by an appropriately licensed and rated flight instructor occupying a pilot seat:

Dual flight time means flight time during which a person is receiving flight instruction from an appropriately licensed and rated pilot on board a dual control aircraft:

EDTO alternate aerodrome means an adequate aerodrome that—

- (1) is certificated under Part 139 or meets safety requirements equivalent to such an aerodrome; and
- (2) provides services and facilities for the aeroplane type being used including—
 - (i) meteorological forecasts for the aerodrome; and
 - (ii) at least 1 suitable instrument approach procedure that is published in the AIP of the State concerned; and
 - (iii) an aerodrome control service or aerodrome flight information service that can be provided from at least 30 minutes before the estimated time of arrival of the aeroplane; and
 - (iv) rescue and fire fighting equipment to at least category 4 that can be provided, with at least 30 minutes prior notification, at the estimated time of arrival of the aeroplane:

EDTO critical fuel means the fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most time-limiting system failure:

EDTO entry point means the first point on a route flown by an aeroplane on an EDTO where the flight time from that point to an adequate aerodrome, calculated at a one engine inoperative cruise speed in still air and ISA conditions, exceeds the threshold time for the aeroplane:

EDTO significant system means the aeroplane propulsion system and any other aeroplane system whose failure could adversely affect the safety of an EDTO, or whose functioning is important to the continuing safety of an EDTO and to a safe landing during a diversion:

EDTO verification flight means a flight conducted to establish that the aeroplane is serviceable for an EDTO:

Elevation means the vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level:

Emergency airworthiness directive means an airworthiness directive that is issued by the Director in accordance with section 429(1) of the Act:

Emergency locator transmitter means an equipment that broadcasts a distinctive signal on a designated radio frequency to facilitate a search and rescue operation:

Emergency locator transmitter (automatic fixed) means an emergency locator transmitter that is automatically activated and permanently attached to an aircraft:

Emergency locator transmitter (survival) means an emergency locator transmitter that is stowed in an aircraft in a manner which facilitates its ready use in an emergency, is removable from an aircraft, and is manually activated:

Emergency parachute means a parachute assembly designed and intended to be used by persons in an emergency:

Emergency position indicating radio beacon means an equipment that broadcasts a distinctive signal on a designated radio frequency to facilitate a search and rescue operation, is designed to float upright, and is manually activated:

Empty weight means the empty weight of an aircraft, including—

- (1) the airframe, engines, propellers, and rotors of the aircraft; and
- (2) any fixed equipment on the aircraft; and
- (3) any fixed ballast on the aircraft; and
- (4) any unusable fuel on the aircraft; and
- (5) full operating fluids required for the normal operation of the aircraft's systems, except potable water, lavatory precharge water, and water intended for injection into the engines of the aircraft; and
- (6) items specified in the weight and balance section of the flight manual or flight manual and supplement:

Enhanced vision imaging system refers to technology which uses imaging sensors to see in front and along the flight path of aircraft to display an image of the external scene topography to the flight deck:

Escorted passenger means any passenger requiring the personal attendance of an appointed escort, during an air transport operation:

Extended diversion time operation means a flight by a multi-engine turbine powered aeroplane where the flight time (calculated at a one engine inoperative cruise speed in still air and ISA conditions) from a point on the route to an adequate aerodrome is greater than the threshold time for the aeroplane:**Extended over-water operation** means any aeroplane operation over a planned route that contains a point in excess of 50 nautical miles from shore:

Extended Squitter means the additional data transmitted by an extended squitter transponder, which includes the standard Mode S transmission and the data required for ADS-B OUT:

Final reserve fuel means the minimum quantity of fuel required to provide a margin to secure the safe completion of a flight in the event of any unplanned manoeuvring in the vicinity of the destination or alternate or a suitable aerodrome, as the case may be, and in ordinary circumstances remains on board until completion of the landing:

Firearm has the same meaning as in section 11(2) of the Aviation Crimes Act 1972:

Fit and proper person means a person who satisfies the fit and proper person test specified in the Act:

Flight attendant means an appropriately trained person assigned by the operator to be responsible to the pilot-in-command for passenger safety on an aircraft:

Flight crew member means an appropriately qualified person assigned by the operator for duty in an aircraft during flight time as a pilot or flight engineer:

Flight evaluation means a flight or series of flights to test the airworthiness and controllability of an aircraft throughout its range of speeds and throughout all manoeuvres intended for the normal operation of the aircraft:

Flight examiner means a person who holds a flight examiner rating issued in accordance with Part 61 or is approved by the Director to conduct specific flight tests:

Flight following service means a service providing a flight watch over an aircraft, which initiates emergency action in the event of a missed report or non-arrival of the aircraft within a specific time-frame:

Flight information centre means a unit established to provide an area flight information service and an alerting service:

Flight information region means airspace of defined dimensions within which flight information services and alerting services are provided:

Flight information service has the meaning given to it in section 5 of the Act:

Flight instruction means instruction in the control of aircraft in basic and advanced flight manoeuvres; and includes instruction in respect of conversion from fixed-wing to rotary-wing aircraft or from rotary-wing to fixed-wing aircraft:

Flight instructor means a person who holds a flight instructor rating issued in accordance with Part 61 or is approved by the Director to provide flight instruction:

Flight level means a surface of constant atmospheric pressure expressed in terms of hundreds of feet that—

- (1) is related to a specific datum 1013.2 hPa; and
- (2) is separated from other such surfaces by specific pressure intervals:

Flight manual means a manual, associated with the certificate of airworthiness, containing limitations within which the aircraft may be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft:

Flight plan means specified information that is required under the rules to be provided to an ATS unit or to a flight following service regarding an intended flight, or portion of a flight, of an aircraft:

Flight recorder means any type of recorder installed in an aircraft for the purpose of complementing an investigation relating to an accident or incident:

Flight time means—

- (1) for an aircraft other than a balloon, the total time from the moment an aircraft first moves for the purpose of flight until the moment it comes to rest at the end of the flight including any associated push back, taxiing and subsequent holding time; and

- (2) for a balloon, the total time from burner on for the purpose of inflation for flight until the envelope is completely deflated at the end of a flight:

Foreign aircraft means an aircraft that—

- (1) is required under Part 47 to be registered; and
- (2) is not a New Zealand registered aircraft:

Formation flight means more than one aircraft which—

- (1) navigate and report as a single aircraft; and
- (2) are no more than one nautical mile laterally and within 100 feet vertically from the formation leader:

Fully functioning dual controls means pitch, roll, yaw, and engine power controls which can be operated from each pilot station:

General aviation area means an airspace, of defined dimensions, in which intensive VFR activity may occur and the rules of Class G airspace apply:

General direction in relation to Part 67 means a general direction issued by the Director under clause 25 of Schedule 2 to the Act:

Geographical co-ordinates mean latitude and longitude that are expressed relative to the geodetic reference datum of the World Geodetic System 1984:

Glider—

- (1) means a non-power-driven heavier-than-air aircraft that derives its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight; and
- (2) includes a powered glider whether the engines are operating or not:

Gliding organisation means the holder of an aviation recreation organisation certificate issued in accordance with Part 149 that authorises specified privileges associated with the operation of gliders:

GNSS database means an electronic memory containing information on airports, navigation aids reporting points, Standard Instrument Departures, Standard Instrument Arrivals, instrument approaches, special use airspace and other items of value to the pilot:

Goods means all kinds of moveable property, including animals and mail:

Hang glider means a glider, including a powered glider, that is capable of being launched and landed solely by the use of the pilot's legs, and includes paragliders:

Hang gliding organisation means the holder of an aviation recreation organisation certificate issued in accordance with Part 149 that authorises specified privileges associated with the operation of hang gliders:

Heavier-than-air aircraft means any aircraft deriving its lift in flight chiefly from aerodynamic forces:

Height means the vertical distance of a level, a point, or an object considered as a point, measured from a specified datum and includes the vertical dimension of an object:

Helicopter means a rotorcraft incorporating one or more power driven rotors:

Heliport means any defined area of land or water, and any defined area on a structure, intended or designed to be used either wholly or partly for the landing, departure, and surface movement of helicopters:

Hover means a helicopter flight at a constant height and position over the surface:

ICAO Annex means an Annex to the Convention:

ICAO Contracting State means a State that is a signatory to the Convention; and includes an organisation established by a group of

States that are signatories to the Convention to issue an aviation related document or authorisation on behalf of those States:

IFR flight means a flight conducted in accordance with the instrument flight rules:

Impaired means affected by fatigue, injury, medical condition, or by the consumption of alcohol or other drugs such that the person may be a risk to the safety of himself or herself or of any other person:

Incident has the meaning given to it in section 5 of the Act:

In-flight shutdown means—

- (1) when an engine ceases to function in flight and is shutdown, whether self induced, crew initiated or caused by some other external influence including but not limited to flameout, internal failure, foreign object ingestion, icing; or
- (2) the inability to obtain or control thrust necessary for normal operations, but excludes the airborne cessation of the functioning of an engine when immediately followed by an automatic engine relight:

Instructions for continued airworthiness means current airworthiness data provided by the manufacturer of an aeronautical product, a product, or a component, and include any related airworthiness limitations mandated by the airworthiness authority of the State of Design:

Instrument approach operation type A means an instrument approach procedure with a minimum descent height or decision height at or above 75m (metric) or 250ft (imperial):

Instrument approach operation type B means an instrument approach procedure with a decision height below 75m (metric) or 250ft (imperial):

Instrument approach procedure means a series of predetermined manoeuvres by reference to flight instruments with specified

protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route, to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply:

Instrument flight means flight during which an aircraft is piloted solely by reference to instruments and without external reference points:

Instrument flight procedure means a visual, or an instrument, flight procedure that comprises, or is associated with, any of the following for the operation of aircraft under IFR:

IFR routes, including IFR arrival routes and IFR departure routes:

IFR altitude:

standard instrument arrival:

standard instrument departure:

significant points including but not limited to:

navigation aid change over point:

IFR reporting point:

significant IFR point:

fix:

IFR holding pattern:

instrument approach procedure including, the associated missed approach procedure and meteorological minima:

instrument departure procedure and the associated meteorological minima:

Instrument flight procedure service means a service that includes the design, validation, certification, or maintenance of an instrument flight procedure:

Instrument flight time means time during which an aircraft is piloted solely by reference to instruments and without external reference points:

Instrument meteorological conditions means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling less than the minima specified for visual meteorological conditions:

Instrument runway means one of the following types of runways intended for the operation of aircraft using instrument approach procedures:

- (1) *Non-precision approach runway*: A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type A and a visibility not less than 1,000 m (metric):
- (2) *Precision approach runway, category I*: A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) not lower than 60 m (metric) or 200 ft (imperial) and either a visibility not less than 800 m or a runway visual range not less than 550 m (metric):
- (3) *Precision approach runway, category II*: A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 60 m (metric) or 200 ft (imperial) but not lower than 30 m (metric) or 100 ft (imperial) and a runway visual range not less than 300 m (metric):
- (4) *Precision approach runway, category III*: A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B to and along the surface of the runway and:
 - (i) Category IIIA: intended for operations with a decision height (DH) lower than 30 m (metric) or 100 ft (imperial), or no decision height and a runway visual range not less than 175 m (metric):

- (ii) Category IIIB: intended for operations with a decision height (DH) lower than 15 m (metric) or 50 ft (imperial), or no decision height and a runway visual range less than 175 m (metric) but not less than 50 m (metric):
- (iii) Category IIIC: intended for operations with no decision height (DH) and no runway visual range limitations:

Instrument time includes instrument flight time and time during which a pilot is practising simulated instrument flight on an approved mechanical device:

Integrated Aeronautical Information Package means a package which consists of the following elements—

- (1) AIPNZ including amendment service:
- (2) supplements to the AIPNZ:
- (3) NOTAM:
- (4) AIC:
- (5) checklists and summaries:

International aerodrome means an international airport:

International airport means any airport designated as an airport of entry and departure for international air traffic where the formalities incident to customs, immigration, public health, animal and plant quarantine, and similar procedures are carried out:

International NOTAM office means an office that is designated for the international exchange of NOTAM:

International standard atmosphere means the atmospheric standard as described in ICAO Document 7488 – Manual of the ICAO Standard Atmosphere:

Introductory flight means a flight of short duration offered by a flight training organisation to a prospective trainee where the dominant purpose of the flight is to encourage the trainee to become a pilot:

Justifiable aircraft equipment means any equipment necessary for the operation of the aircraft. It does not include equipment or ballast specifically installed, permanently or otherwise, for the purpose of altering the empty weight of an aircraft to meet the maximum payload capacity:

Known customer means a shipper of cargo or mail who has an established association with a regulated air cargo agent or an air operator for the carriage of the shipper's cargo or mail by air and who is registered with the regulated air cargo agent or the air operator:

Landing area means that part of a movement area intended for the landing or take-off of aircraft:

Landing distance available means the length of the runway that is declared by the aerodrome operator as available and suitable for the ground run of an aeroplane:

Level is a generic term relating to the vertical position of an aircraft in flight and meaning variously height, altitude, or flight level:

Lifed, in relation to an aeronautical product or a product or component, means that the instructions for continued airworthiness for the aeronautical product, product, or component specify—

- (1) a finite life time for the aeronautical product, product, or component; or
- (2) a recommended or mandatory overhaul time for the aeronautical product, product, or component:

Light Sport Aircraft means an aircraft, other than a helicopter, having:

- (1) a maximum take-off weight of—
 - (i) 600 kg or less:
 - (ii) 650 kg for an operation on water:

- (2) a maximum gross weight of 600 kg or less for a lighter-than-air- aircraft:
- (3) if powered, a single, non-turbine engine driving a propeller:
- (4) a maximum stall speed of 45 knots:
- (5) if a glider, a maximum never exceed speed of 135 knots:
- (6) if applicable, an unpressurised cabin:
- (7) a maximum seating capacity of 2 seats including the pilot seat:

Lighter-than-air aircraft means any aircraft supported chiefly by its buoyancy in the air:

Mach number means the ratio of true airspeed to the speed of sound:

Mail means any letter, package, parcel, postcard, or other article that is to be delivered by courier, a postal operator, or other postal agency, or diplomatic agency:

Main parachute means a parachute, other than an emergency parachute, that is designed and intended to be used as a primary parachute:

Maintenance, in relation to an aircraft or aircraft component, means all work and inspections performed to ensure the continued airworthiness of the aircraft or aircraft component, and all modifications:

Maintenance logbook means—

- (1) one of the following logbooks as may be appropriate:
 - (i) CAA 2101 Aircraft Logbook:
 - (ii) CAA 2110 Propeller Logbook:
 - (iii) CAA 2158 Engine Logbook:

- (iv) CAA 1464 Aircraft Airworthiness Directives, Aircraft Modifications, Engine and Propeller Installations Logbook; or
- (2) any other document or storage medium that—
 - (i) is acceptable to the Director; and
 - (ii) provides a record of the maintenance status of the aircraft, product, or component:

Maintenance manual means an approved manual containing limitations within which the aircraft may be considered airworthy, and instructions and information necessary to ensure the aircraft is in an airworthy condition:

Major modification means a modification that could potentially affect the safety of an aircraft or its occupants where, as a result of its embodiment, one or more of the following incidents may occur:

- (1) structural collapse:
- (2) loss of control:
- (3) failure of motive power:
- (4) unintentional operation of, or inability to operate, any systems or equipment essential to the safety or operational function of the aircraft:
- (5) incapacitating injury to any occupant:
- (6) unacceptable unserviceability or maintainability:

Major repair means a repair that could potentially affect the safety of an aircraft or its occupants where, as a result of its embodiment, one or more of the following incidents may occur:

- (1) structural collapse:
- (2) loss of control:

- (3) failure of motive power:
- (4) unintentional operation of, or inability to operate, any systems or equipment essential to the safety or operational function of the aircraft:
- (5) incapacitating injury to any occupant:
- (6) unacceptable unserviceability or maintainability:

Manipulation of controls means manipulate the flight controls to alter the heading, altitude, speed, or other flight parameter of an aircraft, and “manipulate the controls” has the same meaning:

Manoeuvring area has the meaning given to it in section 5 of the Act:

Manufacturer’s maintenance programme means a programme that is contained in a maintenance manual or the instructions for continued airworthiness published by the manufacturer as required by the certificating authority for the aircraft, aircraft engines, propellers, rotors, appliances, emergency equipment, and parts:

Maximum certificated take-off weight, in relation to an aircraft, mean the weight specified as the maximum take-off weight of the aircraft in a flight manual or airworthiness certificate relating to the aircraft:

Maximum diversion time means the maximum flight time, calculated at a one-engine inoperative cruise speed in still air and ISA conditions, that a multi-engine turbine powered aeroplane operating on an EDTO may be from an en-route EDTO alternate aerodrome:

Maximum zero fuel weight means the maximum permissible weight of an aircraft with no disposable fuel or oil. The zero fuel weight figure may be found in either the aircraft type certificate data sheet, the approved Aircraft Flight Manual, or both:

Meteorological information means any meteorological report, analysis, or forecast in support of aviation, and any other statement in support of aviation relating to existing or expected meteorological conditions:

Meteorological service means any of the following services that provide meteorological information in support of aviation:

- (1) *Climatology service*: a service for the development and supply of climatological information for a specific place or airspace:
- (2) *Forecast service*: a service for the supply of forecast meteorological information for a specific area or portion of airspace:
- (3) *Information dissemination service*: a service for the collection and dissemination of meteorological information:
- (4) *Meteorological briefing service*: a service for the supply of written and oral meteorological information on existing and expected meteorological conditions:
- (5) *Meteorological reporting service*: a service for the supply of routine meteorological reports:
- (6) *Meteorological watch service*: a service for maintaining a watch over meteorological conditions affecting aircraft operations in a specific area:

Microlight aircraft means a basic low performance aircraft designed to carry not more than 2 persons which meets low momentum parameters that are acceptable to the Director:

Microlight organisation means the holder of an aviation recreation organisation certificate issued in accordance with Part 149 that authorises specified privileges associated with the operation of microlight aircraft:

Minimum descent altitude means a specified altitude, referenced to mean sea level, in a non-precision approach or circling approach below which descent may not be made without visual reference:

Minimum descent height means a specified height, referenced to the runway threshold, in a non-precision approach or circling approach below which descent may not be made without visual reference:

Minister has the meaning given to it by section 5 of the Act:

Modification means a design change that generally results in a change to the configuration of a product, component, or appliance:

Movement area means that part of an aerodrome intended to be used for the take-off and landing of aircraft and for the surface movement of aircraft, and includes the manoeuvring area, maintenance areas, and aprons:

Multi-pilot aircraft means an aircraft other than a single-pilot aircraft:

Multiple identical system means the same element of an identical but separate EDTO significant system:

Multiple identical system maintenance means for an aeroplane with 2 turbine powered engines, a maintenance action performed on multiple identical systems during the same period of scheduled or non-scheduled maintenance:

Navigation specification means a set of aircraft, operator and requirements for flight crew members needed to support the following types of performance-based navigation operations, within a defined airspace –

- (1) required navigation performance specification based on area navigation that includes the requirements for performance monitoring and alerting, designated by the prefix RNP; or
- (2) an area navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV:

Newly overhauled means a product that has not been operated or placed in service, except for functional testing, since having been overhauled:

New Zealand Air Navigation Register means the New Zealand Air Navigation Register established under Part 71:

New Zealand AOC with ANZA privileges has the meaning given to it in section 5 of the Act:

New Zealand Flight Information Region means—

- (1) all that airspace bounded by the arc of a circle of 200 NM radius centred on S 37 00 16.7, E 174 48 49.1, (Auckland VOR/DME), from S 39 07 38.1, E 171 33 21.7, clockwise to S 37 32 29.5, E 178 56 08.9, a line joining S 37 32 29.5, E 178 56 08.9, S 38 2700.0, W 179 44 00.0, S 42 51 30.0, E 175 03 00.0, S 48 09 00.0, E 168 16 00.0, S 45 55 00.0, E 165 18 00.0, S 41 25 27.0, E 17023 24.0, the arc of a circle of 200 NM radius centred on S 41 2014.0, E 174 49 01.1, (Wellington VOR/DME) from S 41 2527.0, E 170 23 24.0, clockwise to S 39 07 38.1, E 171 33 21.7; with
- (2) an upper limit of flight level 999; and
- (3) the surface of the earth as the lower limit:

New Zealand registered aircraft has the meaning given to it in section 5 of the Act:

New Zealand Register of Aircraft has the meaning given to it in section 5 of the Act:

New Zealand certificate of registration means an aircraft certificate of registration issued by the Director:

Night means the hours between—

- (1) the end of evening civil twilight, which is when the centre of the setting sun's disc is 6 degrees below the horizon; and
- (2) the beginning of morning civil twilight, which is when the centre of the rising sun's disc is 6 degrees below the horizon:

Night vision goggles means a head-mounted, lightweight, and self-contained binocular appliance that amplifies ambient light used to enhance the ability to maintain visual reference to the surface at night:

Night vision imaging system –

- (1) refers to the integration of all the following elements for the successful and safe operation of an aircraft using NVGs –
 - (i) operational procedures;
 - (ii) suitable training, competency and currency requirements;
 - (iii) NVGs and associated equipment;
 - (iv) lighting system and associated aircraft components;
 - (v) continuing airworthiness requirements; but
- (2) excludes –
 - (i) enhanced vision imaging system;
 - (ii) a synthetic vision system;

Non-precision approach procedure means an instrument approach procedure designed for 2D instrument approach operations type A:

[Note - Non-precision approach procedures may be flown using a continuous descent final approach (CDFA) technique. CDFAs with advisory VNAV guidance calculated by on-board equipment are considered 3D instrument approach operations. CDFAs with manual calculation of the required rate of descent are considered 2D instrument approach operations.]

NOTAM means a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations:

NOTAM service means a service for the issue and distribution of NOTAM relevant to air navigation in the New Zealand FIR and in the areas of the Auckland Oceanic FIR in which New Zealand is responsible for air traffic services:

NVG operation means an operation during any part of which NVGs are used to maintain visual reference to the surface in an aircraft which is NVIS equipped and approved for NVIS operations:

One engine inoperative cruise speed means a speed within the certified limits of the aeroplane, selected by the certificate holder and approved by the Director, that is used for calculating fuel reserve requirements and the still air distance associated with a one engine inoperative maximum diversion time for the flight:

Operable, in relation to equipment and instruments, means fully functional, calibrated, and meeting the applicable airworthiness requirements:

Operate, has the meaning given to it in section 5 of the Act:

Operating cycle means a complete flight segment consisting of a take-off, climb, en-route portion, descent, and landing:

Operational area means—

- (1) the movement area at an aerodrome and its associated strips and safety areas; and
- (2) any ground installation or facility provided at an aerodrome for the safety of aircraft operations; and includes
- (3) any other area at an aerodrome that is designated by signs as an operational area

Operational flight plan means the certificate holders plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations, and relevant expected conditions, on the route to be followed and at the aerodromes concerned:

Operations specifications means the conditions imposed by the Director on the air operator certificate and includes any authorisations, limitations, and procedures that form part of the certificate:

Originating aircraft means any aircraft about to be used on a regular air transport passenger service from any New Zealand aerodrome, that has been emptied of passengers and goods at the conclusion of a previous flight or flights, but does not include any aircraft transiting New Zealand or any New Zealand airport, in circumstances where passengers and goods are added to an existing load:

Overhaul, in relation to an aircraft or aircraft component, means to perform a major work operation which involves dismantling and complete testing to specification and renewal of operational life:

Owner, in relation to any aircraft, includes any person lawfully entitled to the possession of the aircraft for 28 days or longer:

Parachute means any device, without a motor in operation, comprising a flexible drag, or lift/drag, surface from which a load is suspended by shroud lines capable of controlled deployment from a packed condition:

Parachute assembly means any parachute and its associated harness and container system and other component parts for use by persons:

Parachute landing area means an area onto which parachute landings are intended to be made:

Parachute organisation means the holder of an aviation recreation organisation certificate issued in accordance with Part 149 that authorises specified privileges associated with parachute operations:

Paraglider means a hang glider with no rigid primary structure:

Passenger has the meaning given to it in section 5 of the Act:

Payload capacity means—

- (1) when a maximum zero fuel weight is not prescribed, the maximum certificated take-off weight of an aircraft, less the empty weight, less all justifiable aircraft equipment, and less the operating load consisting of—

- (i) the minimum weight of fuel required under the CAR for a flight between domestic points 174 NM apart, assuming VFR weather conditions; and
 - (ii) the lesser of the maximum oil capacity as specified on the Type Certificate Data Sheet or 160 kg of oil; and
 - (iii) required flight crew members at 91 kg per crew member; and
 - (iv) required catering supplies; or
- (2) when a maximum zero fuel weight is prescribed, the maximum zero fuel weight less the empty weight that, except for disposable fuel and oil, consists of—
- (i) all justifiable aircraft equipment, and the operating load; and
 - (ii) minimum flight crew at 91 kg per crew member; and
 - (iii) required catering supplies:

Performance-Based Navigation means an area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace, and **PBN route** or **PBN operations** has a similar meaning:

Performance-class 1 helicopter means a helicopter with performance characteristics such that, in case of critical power-unit failure, it is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area:

Performance deterioration allowance means the difference between the aeroplane manufacturer's published fuel consumption figures and the actual fuel consumption applicable to a specific aeroplane:

Personal locator beacon means an equipment that broadcasts a distinctive signal on a designated radio frequency to facilitate a search and rescue operation, is designed to be carried on a person, and is manually activated:

Pilot-in-command, has the meaning given to it in section 5 of the Act:

Point of no return means the last possible geographic point at which an aeroplane can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight:

Polar area means an area north of 78 degrees north latitude or an area south of 60 degrees south latitude:

Powered glider means an aircraft equipped with one or more engines which has, with the engine or engines not operating, the performance characteristics of a glider:

Precision approach procedure means an instrument approach procedure utilising azimuth and glide path information:

Pre-flight information bulletin means a presentation of current NOTAM information of operational significance, prepared prior to flight:

Pre-flight information service means a service for the provision of aeronautical information to a third party for pre-flight planning purposes:

Pressure altitude means an atmospheric pressure, expressed in terms of altitude, which corresponds to that pressure in the standard atmosphere:

Primary-means navigation system means a navigation system approved for a given navigation specification, or for a phase of flight, that is used to navigate safely on the planned route or procedure:

Priority part means a part or assembly in a type certificated product, the failure of which is likely to cause an unsafe condition in an aircraft, aircraft engine or propeller:

Product means an aircraft, aircraft engine, or propeller:

Progressive inspection means an inspection of a complete aircraft that is split into a number of smaller inspections:

Propeller means a device, for propelling an aircraft, that has blades on an engine-driven shaft and that when rotated produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of engines:

Propulsion system means an engine and includes any associated item of equipment utilised for sustaining, monitoring and controlling the power or thrust output of an engine installed on the airframe:

RAIM means a function whereby the airborne GNSS receiver/processor detects a position error that exceeds the GNSS position integrity performance requirements of the TSO for that phase of flight. It gives a visual and/or aural warning when appropriate:

RAIM Warning (RAIM not available message) means a warning that the integrity of the navigation position solution from GNSS satellites may be unreliable:

Rating means an authorisation entered on, or associated with, a licence, certificate, or logbook, and forming part of it, stating special conditions, privileges, or limitations relating to the licence or certificate:

Regular air transport passenger service means a service offered by an operator consisting of four or more air transport operations for the carriage of passengers between two or more aerodromes within any consecutive 28 day period:

Regular air transport service means a service offered by an operator consisting of four or more air transport operations between two or more aerodromes in any consecutive 28 day period:

Regulated air cargo agent means the holder of a regulated air cargo agent certificate granted under section 75 of the Act and in accordance with Part 109:

Remote aerodrome means any structure or any area of land or water used for take-off or landing—

- (1) to which access by road or water is restricted, limited or obstructed by geographical conditions; and
- (2) that does not meet standards for aerodromes that are acceptable to the Director under Part 139:

Repair means a design change that is intended to return the product, component, or appliance to its original, or properly modified configuration:

Reporting point means a specified (named) geographical location in relation to which the position of an aircraft can be reported:

Required inspection means any inspection required by the CAR, an airworthiness directive, or by an approved maintenance manual, programme or schedule:

Required navigation performance means a statement of the navigation performance accuracy necessary for operation within a defined area of airspace:

Reserve parachute means a parachute assembly designed and intended to be used as a secondary parachute in the event of the failure of the main parachute:

Rotorcraft means any heavier-than-air aircraft which derives its lift in flight from the reaction of the air on one or more rotors on substantially vertical axes:

Routine inspection in relation to a progressive inspection, means a visual inspection of an aircraft and its components, systems and equipment as far as practicable without disassembly:

RNP performance means a containment value, expressed as a distance in nautical miles from the intended position, within which flights would be for at least 95% of the total flying time:

Runway means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft:

Runway end safety area means an area symmetrical about the extended centre line of the runway and adjacent to the end of the runway strip primarily intended to reduce the risk of damage to an aeroplane undershooting or over-running the runway:

Runway strip means a defined area including the runway, and stopway (if a stopway is provided), that is intended—

- (1) to reduce the risk of damage to an aircraft running off the runway; and
- (2) to provide obstacle protection for aircraft flying over the runway strip during take off or landing operations:

Runway visual range means the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centreline:

SARTIME means the time nominated by a pilot for the initiation of alerting action:

Searching means the application of technical or any other means to detect a weapon, explosive, or other dangerous device, article or substance, that may be used to commit an act of unlawful interference:

Security means a combination of measures and human and material resources intended to safeguard civil aviation against acts of unlawful interference:

Security area has the meaning given to it in section 133 of the Act:

Security control means a method used to prevent the introduction on board an aircraft or at an aerodrome of a weapon, explosive or other dangerous device, article or substance that may be used to commit an act of unlawful interference:

Security designated aerodrome has the meaning given to it in section 5 of the Act:

Security designated navigation installation has the meaning given in section 5 of the Act:

Security enhanced area has the meaning given to it in section 5 of the Act:

SEIFR passenger operation means an air transport operation carrying passengers in a single-engine aeroplane under IFR:

Serious incident means an incident involving circumstances indicating that an accident nearly occurred:

Shore means that area of the land adjacent to the water that is above the high-water mark and excludes land areas that are intermittently under water:

SIGMET information means information issued by a meteorological office concerning the occurrence or expected occurrence of specified enroute weather phenomena that may affect the safety of aircraft operations:

Single-pilot aircraft means an aircraft that is authorised in its flight manual to be operated with a minimum flight crew of 1 pilot for the type of flight:

Slippery wet runway means a wet runway where the surface friction characteristics of a significant portion of the runway have been determined to be degraded:

Special VFR flight means a VFR flight cleared by an ATC unit to operate within a control zone in meteorological conditions below visual meteorological conditions:

Specification is the minimum performance standard specific to an article used on an aircraft:

Standard part means an aeronautical product that conforms to an aeronautical specification that is published in one of the following series and includes design, material, manufacture, and identification requirements:

- (1) Air Force-Navy Aeronautical Standard (AN):
- (2) American National Standards Institute (ANSI):
- (3) Australian Standards (AS):
- (4) British Standards, Aircraft Series (BS):
- (5) Military Standards (MS):
- (6) Military Specifications (MIL-SPEC):
- (7) National Aerospace Standards (NAS):
- (8) New Zealand Standards (NZS):
- (9) SAE Aerospace standard (AS):
- (10) Society of Automotive Engineers (SAE):

Standing water means water of depth greater than 3mm and includes running water of depth greater than 3mm:

Statement of content means an accurate description of the items that are contained within a consignment of cargo or mail for carriage by air:

State of Design means the State, or an organisation established by a group of States, having jurisdiction over the organisation responsible for the type design:

State of Registry means the State on whose register the aircraft is entered:

Stopway means a defined rectangular area on the ground at the end of the take-off run available prepared as a suitable area on which an aircraft can be stopped in the case of an abandoned take-off:

Student pilot means a person who acts as a pilot of an aircraft (other than a microlight aircraft, hang glider, glider, powered glider or balloon) while undertaking training for a pilot licence under Part 61 but who does not hold a current pilot licence under that part:

Synthetic flight trainer means equipment in which flight conditions are simulated on the ground; and includes—

- (1) a flight simulator, being an apparatus which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the normal environment of flight crew members, the systems, and the performance and flight characteristics of that type are realistically simulated:
- (2) a flight procedure trainer, being an apparatus that provides a representation of aircraft to the extent that realistic flight deck environment, instrument responses, simple systems, and the performance and flight characteristics of aircraft of a particular class or type are simulated:
- (3) a basic instrument flight trainer, being an apparatus equipped with appropriate instruments, simulating the flight deck environment of an aircraft in flight in instrument flight conditions, in which a pilot may be instructed or tested in basic instrument flight manoeuvres and procedures:

Synthetic vision system refers to a system which uses computer generated images of the external scene topography from the perspective of the flight deck, derived from aircraft attitude, high precision navigation solutions, and databases of terrain obstacles and relevant cultural features to display a synthetic vision image of the external scene topography to the flight deck:

Take-off distance available means the length of the take-off run available plus the length of any clearway:

Take-off run available means the length of the runway declared by the aerodrome operator as available and suitable for the ground run of an aeroplane taking-off:

Take-off weight means the weight of the aeroplane at the commencement of the take-off run and includes everything and everyone carried in or on the aeroplane at the commencement of the take-off run:

Tandem master means the person responsible for the direct control of a tandem parachute descent:

Tandem pair means a tandem master and tandem rider:

Tandem parachute descent means a parachute descent of a tandem pair in a common tandem parachute assembly:

Tandem rider means a person participating in a tandem parachute descent using the secondary harness of a tandem harness system:

Taxi means movement of an aircraft on the surface of an aerodrome or on water, excluding take-off and landing, but including, in the case of helicopters, operation over the surface of an aerodrome within a height band associated with ground effect and at speeds associated with air taxiing:

Taxi fuel means the fuel required for the operation of an aircraft between the engine start to commencement of the take-off run and between the runway turnoff following completion of landing run to engine shut down:

Technical arrangement means an arrangement between New Zealand and another State to mutually recognise each State's aircraft maintenance organisation certification, maintenance standards and documentation, and personnel licences and certificates to allow maintenance performed on aircraft and components in one State to be recognised by the other State in accordance with the terms of the arrangement:

Technical data are drawings, instructions or other data required to be used for product certification, approvals, and authorisations under Part 21 or for the maintenance, modification, and repair of products, their components, and appliances under Part 43:

Technical Instructions means ICAO Document 9284 *Technical Instructions for the Safe Transport of Dangerous Goods by Air* approved and published by decision of the Council of the International Civil Aviation Organisation under Annex 18 of the Convention:

Technical log means the technical log that is required for every applicable aircraft under rule 91.619:

TEMPO —

- (a) when used in a TAF, means a description of forecast temporary fluctuations in the meteorological conditions which reach or pass specified values and last for a period of less than one hour in each instance and, in the aggregate, cover less than one-half of the period during which the fluctuations are forecast to occur; or
- (b) when used in a TREND, means a description of forecast temporary fluctuations in the meteorological conditions, which reach or pass specified threshold values and last for a period of less than one hour in each instance. Such fluctuations are expected to occur during the 2 hours following the issue time of the METAR, SPECI or METAR AUTO, and to take place sufficiently infrequently for the prevailing conditions to remain those originally reported in the METAR, SPECI or METAR AUTO:

Three-view means, the accurate depiction of an aircraft from a collection of views that includes a plan, a front elevation, and a side elevation:

Threshold time means—

- (1) 60 minutes for an aeroplane with 2 turbine powered engines; and
- (2) 180 minutes for an aeroplane with more than 2 turbine powered engines:

Tier 1 security designated aerodrome means an aerodrome designated under section 120 of the Act:

Time in service means, for maintenance time records, aircraft log records, and similar purposes, the elapsed time from the aircraft leaving the surface until touching it again on landing:

Time limited system means any system on an aeroplane that has a defined time limited capability and on which the duration of the available flight time of the aeroplane is dependent on:

Traffic information means information issued by an ATS unit, to alert a pilot to other known or observed air traffic which may be in proximity to the position, or intended route of flight, and to help the pilot avoid a collision:

Traffic load means the total weight of passengers, baggage, and cargo:

Transfer baggage means baggage that is transferred directly from one aircraft to another aircraft:

Transit baggage means baggage that—

- (1) is on board an aircraft that arrives at an aerodrome; and
- (2) is still on board that aircraft when that aircraft leaves the aerodrome:

Translation circuit means a circuit in a helicopter that includes translation to forward flight:

Trip fuel means the fuel required for the planned flight from the commencement of the take-off run to the completion of landing run prior to runway turnoff:

Turbine powered means powered by turbojet, or turbofan, or turboprop, or turboshaft:

Turbofan means a turbojet core engine that uses a proportion of the residual gas flow energy to drive a compressor ducting gas flow around the core engine as additional propulsion:

Turbojet means a gas turbine engine that uses the residual gas flow energy directly as propulsion:

Turboprop means a gas turbine engine that uses the residual gas flow energy to drive a propeller:

Turboshaft means a gas turbine engine that uses the residual gas flow energy to drive a shaft:

Type—

- (1) in relation to the licensing of aviation personnel means all aircraft of the same basic design, including all modifications thereto except those modifications which result in a significant change in handling or flight characteristics; or
- (2) in relation to the certification of aircraft, aircraft engines, or propellers, means those aircraft, aircraft engines or propellers which are similar in design:

UNICOM Service means a ground radio communications service in the aeronautical mobile service providing local aerodrome information for the facilitation of aviation, and, for the avoidance of doubt, a UNICOM service is not an air traffic service:

Unlawful interference means an act or attempted act endangering a passenger, crew member, ground personnel, aircraft, or facility:

Unmanned aircraft means an aircraft designed to operate with no pilot on board and includes unmanned balloons, control line model aircraft, free flight model aircraft and remotely piloted aircraft:

Unmanned aircraft system means an aircraft and its associated elements which are operated with no pilot on board:

Valid means —

- (a) in respect of a licence or rating, the document has been issued in accordance with the Civil Aviation rules, and is not expired, suspended, or revoked; and
- (b) in respect of a medical certificate, the medical certificate has been issued in accordance with the Act, and is not expired, suspended, or revoked:

Validation permit means a permit issued under rules 61.7 and 61.9 and section 75 of the Act to a foreign pilot permitting the holder to exercise privileges under that licence:

Variant means an aeroplane which is a derivative of a base aeroplane type or master series, but has differences in equipment or procedures which require additional flight crew knowledge, skills, or abilities for safe operation:

VFR flight means a flight conducted in accordance with the visual flight rules:

Visibility means the ability, as determined by atmospheric conditions and expressed in units of measurement, to see and identify prominent unlighted objects by day and prominent lighted objects by night:

Visual meteorological conditions means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling equal to or better than specified minima:

Wet, in relation to a runway, means a runway surface is covered by any visible dampness or water up to and including 3 mm deep within the area intended to be used:

ZFT simulator means a synthetic flight trainer which—

- (1) meets the standard of Type VII as described in ICAO Document 9625, 4th edition 2015, volume 1, ISBN 978-92-9249-761-3; or
- (2) meets the standard of Level D as described in European Aviation Safety Agency Certification Specification CS-FSTD(A) Issue 2 of 3 May 2018; or
- (3) meets the standard of level D as described in Title 14 Part 60 of the Code of Federal Regulations issued by the Federal Aviation Administration; or
- (4) meets an equivalent standard acceptable to the Director.

1.3 Abbreviations

In rules made under the Act—

ACC means area control centre:

ACAS means airborne collision avoidance system:

AD means airworthiness directive:

ADF means automatic direction-finder:

ADS-B means automatic dependent surveillance broadcast:

AEDRS means automatic engine data recording system:

AELS means Aircraft Emergency Location System:

AFCS means automatic flight control system:

AFRU means an Aerodrome Frequency Response Unit:

AFS means aeronautical fixed service:

AFTN means aeronautical fixed telecommunication network:

AGL means above ground level:

AIC means Aeronautical Information Circular:

AIP means Aeronautical Information Publication:

AIPNZ means the Aeronautical Information Publication New Zealand:

AIRAC means aeronautical information regulation and control:

AIS means aeronautical information service:

AMC means an accredited medical conclusion, as defined in clause 1(1) of Schedule 1 of the Act:

AMSL means above mean sea level:

ANZA means Australia New Zealand Aviation:

APU means auxiliary power unit:

AQP means advanced qualification programme:

ARC means aerodrome reference code:

ARFL means aeroplane reference field length:

ARINC means Aeronautical Radio Incorporated:

ASDA means accelerate-stop distance available:

ATC means air traffic control service:

ATCRBS means air traffic control radio beacon system:

ATIS means automatic terminal information service:

ATS means air traffic services:

AWIB means an Aerodrome and Weather Information Broadcast:

BRNAV means basic area navigation:

BTPD means body temperature and pressure dry:

BTPS means body temperature and pressure standard:

CAA means the Civil Aviation Authority of New Zealand:

CAR means Civil Aviation Rules:

CBIP means Certification Board for Inspection Personnel:

CDFA means a continuous descent final approach:

CMP means configuration, maintenance and procedures standards document:

CRM means crew resource management:

CVR means cockpit voice recorder:

DA means decision altitude:

dBm means a power expressed in decibels with a reference level of 1 milliwatt:

dBW means a power expressed in decibels with a reference level of 1 watt:

DF means direction finding:

DFDAU means digital flight data acquisition unit:

DFDR means digital flight data recorder:

DH means decision height:

DME means distance measuring equipment:

EDTO means extended diversion time operation:

EET means estimated elapsed time:

EFIS means electronic flight instrument system:

EGT means exhaust gas temperature:

ELT means emergency locator transmitter:

ELT(AF) means emergency locator transmitter (automatic fixed):

ELT(S) means emergency locator transmitter (survival):

EPIRB means emergency position indicating radio beacon:

EPR means engine pressure ratio:

ETA means estimated time of arrival:

ETOPS means extended-range twin-engine operations:

FAR means Federal Aviation Regulations issued by the Federal Aviation Administration of the United States of America:

FDAU means flight data acquisition unit:

FDPS means flight data processing system:

FIC means flight information centre:

FIR means flight information region:

GAA means general aviation area:

GPS means global positioning system:

GNSS means global navigation satellite system:

GPWS means ground proximity warning system:

HF means high frequency:

HUD means head up display:

IAP means instrument approach procedure:

IATA means the International Air Transport Association:

ICAO means the International Civil Aviation Organisation established under the Convention; and includes any successor to the Organisation:

IFR means instrument flight rules:

IFSD means in-flight shut down:

ILS means instrument landing system:

IMC means instrument meteorological conditions:

ISA means international standard atmosphere:

LDA means landing distance available:

LOC means localiser:

LRNS means long range navigation system:

LSA means Light Sport Aircraft

MCTOW means maximum certificated take-off weight:

MDA means minimum descent altitude:

MDH means minimum descent height:

ME1 means a medical examiner who holds a Medical Examiner
1 Certificate issued under the Act:

ME2 means a medical examiner who holds a Medical Examiner
2 Certificate issued under the Act:

MEL means minimum equipment list:

MLS means microwave landing system:

MNPS means minimum navigation performance specifications:

MTOPP means mean tracheal oxygen partial pressure:

NDB means non-directional radio beacon:

NDT means non-destructive testing:

NM means nautical mile:

NOF means international NOTAM office:

NPA means non-precision approach:

NVG means night vision goggles:

NVIS means night vision imaging system:

NZANR means New Zealand Air Navigation Register:

NZPMA means New Zealand Parts Manufacturing Approval:

NZTSO means New Zealand Technical Standard Order:

OGE means out of ground effect:

PAR means precision approach radar:

PBCS means Performance Based Communications and Surveillance:

PBN means Performance-Based Navigation:

PIB means Pre-flight Information Bulletin:

PLA means parachute landing area:

PLB means personal locator beacon:

PRA means precision radar approach

PSR means primary surveillance radar:

QFE means atmospheric pressure at aerodrome level or at runway threshold:

QNH means an altimeter sub-scale setting to obtain elevation when on the ground:

RAIM means receiver autonomous integrity monitoring

RDPS means radar data processing system:

RESA means a runway end safety area:

RF means radio frequency:

RFDPS means radar (surveillance) and flight data processing system:

RNAV means area navigation:

RNP means required navigation performance:

RPM means revolutions per minute:

RVR means runway visual range:

RVSM means reduced vertical separation minimum:

SEIFR means single-engine IFR:

SELCAL means selective calling system:

SFAR means Special Federal Aviation Regulations issued by the Federal Aviation Administration of the United States of America:

SSR means secondary surveillance radar:

STC means Supplemental Type Certificate:

STPD means standard temperature and pressure dry:

TAWS means terrain awareness and warning system:

TBO means time between overhaul:

TCAD means traffic alert and collision avoidance device:

TCAS means traffic alert and collision avoidance system:

TODA means take-off distance available:

TORA means take-off run available:

TSO means a technical standard order that is issued by the Federal Aviation Administration of the United States of America:

UAS means unmanned aircraft system:

UF means uplink formats:

UHF means ultra high frequency:

UTC means co-ordinated universal time:

V₁ means take-off decision speed:

V₂ means the initial climb out speed:

V_{EF} means the calibrated speed at which the critical engine is assumed to fail:

V_s means the stalling speed:

VFR means visual flight rules:

VHF means very high frequency:

VMC means visual meteorological conditions:

VOLMET means meteorological information for aircraft in flight:

VOR means VHF omnidirectional radio range:

VSM means vertical separation minimum:

VSWR means voltage standing wave ratio:

VTA means vertebrate toxic agent:

ZFT means zero flight time.