STATUTORY INSTRUMENTS

S.I. No. 72 of 2004

IRISH AVIATION AUTHORITY

(RULES OF THE AIR) ORDER, 2004

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IRISH AVIATION AUTHORITY

(RULES OF THE AIR) ORDER, 2004

S.I. No. 72 of 2004

The Irish Aviation Authority, in pursuance of sections 58, 59 and 60 of the Irish Aviation Authority Act 1993 (No. 29 of 1993) as amended by the Air Navigation and Transport (Amendment) Act, 1998 (No. 24 of 1998) and the Aviation Regulation Act, 2001 (No. 1 of 2001), hereby orders as follows:

- 1. (1) This Order may be cited as the Irish Aviation Authority (Rules of the Air) Order, 2004.
 - (2) This Order shall come into operation on the 1st day of March 2004.
 - (3) In this Order:

"the Act" means the Irish Aviation Authority Act, 1993 (No. 29 of 1993) as amended;

"aircraft" means any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface;

"direction" means a direction issued by the Authority;

"the Authority" means the Irish Aviation Authority;

"prescribed" means prescribed by a direction given by the Authority under this Order or under any other Order or by a direction or Order issued pursuant to a provision of the Act.

- (4) Every expression or word to which a particular meaning is assigned in Part 1 of the Schedule to this Order shall have, in Articles 2 to 18 of this Order, the meaning so assigned to it.
- 2. In this Order a reference to an enactment or order shall, unless the context otherwise requires, be construed as a reference to the enactment or order as amended, as extended by or under any subsequent enactment or order.
- 3. Directions under this Order may be published in the Aeronautical Information Publication (Ireland) including its amendments and supplements or given in the form of Notices to Airmen (NOTAMs), Aeronautical Information Circulars or Aeronautical Notices [to Aircraft Owners, Operators and Engineers] or by notice sent by registered post or other means directly to the person affected.

- 4. This Order shall, save where the contrary intention appears, apply to all aircraft when in or over the State and to aircraft registered in the State wherever they may be but, in relation to aircraft registered in the State, when in or over the territory of another state, this Order shall apply only insofar as its provisions do not conflict with any rules made by that other state relating to flights over its territory.
- 5. The operation of an aircraft, whether in flight or on the manoeuvring area of an aerodrome or heliport, shall be in compliance with Articles 2 to 18 of this Order and the Rules in Part II of the Schedule to this Order and, when in flight, with the Visual Flight Rules in Part III of the Schedule to this Order or the Instrument Flight Rules in Part IV of the Schedule to this Order, as may be appropriate.
- 6. (1) The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in compliance with this Order except that he may depart from a provision of this Order in circumstances where such departure is necessary in the interests of safety.
 - (2) (a) Before beginning a flight a pilot-in-command shall familiarise himself with all available information appropriate to the intended operation;
 - (b) To comply with subparagraph (a) of this paragraph a pilot-in-command shall, in the case of a flight which will not remain in the immediate vicinity of an aerodrome and for all controlled flights, make a careful study of available relevant weather forecasts and reports and, having regard to this study and taking into consideration fuel requirements and an alternative course of action should it become impossible to complete the flight as planned, shall determine whether the flight can be made with safety.
- 7. It shall be the responsibility of a pilot-in-command to determine whether the weather conditions expected or encountered during a flight are such as to enable him to conduct or continue the flight in accordance with the Visual Flight Rules, or will require him to comply with the Instrument Flight Rules.
- 8. (1) If it appears to the Authority or an authorised officer that an aircraft has been or is intended or is likely to be flown from any place within the State in such circumstances that the flight was or would be in contravention of the Act or any of the Orders or Directions thereunder, including this Order, or was or would be a cause of danger to persons or property, the Authority or the authorised officer, may investigate any incident or circumstances concerned and may direct the operator of the aircraft or the person designated by the operator to act as pilot-in-command of the aircraft not to make the flight and the Authority or authorised officer may take such steps as are necessary to detain that aircraft.
 - (2) For the purpose of paragraph (1) of this Article an authorised officer may enter and inspect any aircraft and shall have the powers of section 65(2) of the Act for the purposes of any investigation necessary.

(3) In this article:

"authorised officer" has the meaning ascribed to by the Act and "operator" means any person, organisation or enterprise engaged in or offering to engage in an aircraft operation and, in relation to any particular aircraft, having at the relevant time the management of that aircraft.

- 9. Control zones, control areas, controlled airspace (and associated classifications) and flight information regions shall be such as may be prescribed from time to time.
- 10. The Authority may prescribe points in the State between or over which aircraft arriving in the State from outside the State or leaving the State shall pass.
- 11. Navigation of aircraft in the State shall be subject to such provisions as may be prescribed by the Authority in a direction under this Order or, more generally by an Order or a direction under the Act, and any such provisions shall have effect notwithstanding anything in the Rules in the Schedule to this Order.
- 12. Where the Authority grants permission to an aircraft to fly at a lower height than that required by Rule 3 (1) and 3 (2) in Part II of the Schedule to this Order, such conditions and limitations as are specified in the permission shall be complied with in respect of that aircraft.
- 13. The pilot-in-command shall have final authority as to the disposition of the aircraft.
- 14. No person whose function is critical to the safety of aviation, i.e. safety-sensitive personnel, shall undertake that function while under the influence of any pyschoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substances.
- 15. Nothing in this Order shall operate or have effect to:
 - (a) confer on any person the right to land in any place as against the owner thereof or any other person having any right thereto or any estate or interest therein; or
 - (b) derogate from or prejudice the right or remedies at law or in equity of any person in respect of any injury to persons or property caused by any aircraft.
- 16. The Authority may give directions for carrying out the purposes of this Order and may exempt a person or an aircraft from any provision of this Order subject to any conditions specified which shall be complied with by that person or the pilot in command of that aircraft.
- 17. Nothing in this Order shall be construed as preventing a departure from a provision of this Order including the Rules in the Schedule to this Order to such extent as may be necessary to avoid immediate danger.
- 18. The Rules of the Air set out in the Schedule to this Order shall have effect subject to the foregoing Articles of this Order.

- 19. (1) The Irish Aviation Authority (Rules of the Air) Order, 2001 (S.I. No. 568 of 2001) and the Irish Aviation Authority (Rules of the Air) (Amendment) Order, 2002 (S.I. No. 76 of 2002) are hereby revoked;
 - (2) Notwithstanding the revocation of the Irish Aviation Authority (Rules of the Air) Orders 2001 and 2002 any direction made or permission given under those Orders and in effect on the date of the coming into operation of this Order, shall continue in effect and shall be deemed for all purposes to have been made under this Order.

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Explanatory Note (Not part of the order. Not a legal document)

SCHEDULE

RULES OF THE AIR

PART 1

DEFINITIONS

1. In these Rules:

"acrobatic flight" means manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed;

"ADS Agreement" means an ADS reporting plan which establishes the conditions of ADS data reporting;

"advisory airspace" means advisory areas or advisory routes;

"advisory area" means an area designated by the appropriate ATS authority within a flight information region where an Air Traffic Advisory Service is available;

"advisory route" means a route within a flight information region along which an air traffic advisory service is available;

"aerial application" means the dropping of material from an aerial work aircraft for the purpose of forestry, agriculture, horticulture or aquaculture;

"aerial work" means an aircraft operation in which an aircraft is used for such specified services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, among others;

"aerial work aircraft" means an aircraft, not being a commercial transport aircraft, which is being flown for payment required to be made, or promised, to the operator of the aircraft in respect of the flight or of the purpose for which the flight is made;

"aerodrome" means a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft and also includes an area, whether on land or water or on a building or other structure or elsewhere, intended for use for landing or taking off by aircraft capable of descending or climbing vertically;

"aerodrome control service" means air traffic control service for aerodrome traffic;

"aerodrome control tower" means a unit providing air traffic control service to aerodrome traffic;

"aerodrome traffic" means all traffic on the manoeuvring area of an aerodrome and all aircraft entering, leaving or in an aerodrome traffic circuit;

"aerodrome traffic zone" means an airspace of dimensions defined by the appropriate ATS authority and established by such authority around an aerodrome for the protection of aerodrome traffic;

"aeronautical information publication" (AIP) means a publication issued by or with the authority of a state and containing aeronautical information essential for air navigation;

"aeronautical mobile telecommunications service" means a telecommunications service between aircraft stations and aeronautical stations or between aircraft stations;

"aeronautical station" means a station (including on board ship or on a platform at sea) in the aeronautical mobile 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;

"airship" means a power-driven lighter-than-air aircraft;

"air-ground communication" means a two-way communication between aircraft and stations or locations on the surface of the earth;

"air-ground control radio station" means an aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area;

"air-taxiing" means the movement of a helicopter above the surface of an aerodrome, normally in ground effect and at a speed normally less than 37 km/h (20 kt);

"air traffic" means all aircraft in flight or operating on the manoeuvring area of an aerodrome;

"air traffic advisory service" means a service provided by the appropriate ATS authority within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans;

"air traffic control clearance" means authorisation for an aircraft to proceed under conditions specified by an air traffic control unit. The term may be abbreviated to "clearance" and may be prefixed by the word "taxi", "take-off", "departure", "en-route", "approach", or "landing", to indicate the particular portion of flight to which the air traffic control clearance relates;

[&]quot;air traffic control service" means a service provided for the purpose of:

- (a) preventing collisions between aircraft, and on the manoeuvring area, between aircraft and obstructions, and
- (b) expediting and maintaining an orderly flow of air traffic;

"air traffic control unit" is a generic term meaning variously, area control centre, approach control unit or aerodrome control tower;

"air traffic service" (ATS) includes the following services, namely, flight information service, alerting service, air traffic advisory service, air traffic control service, area control service, approach control service and aerodrome control service;

"air traffic services airspaces" means airspaces of dimensions defined and alphabetically designated by the appropriate ATS authority within which specific types of flights may operate and for which air traffic services and rules of operation are specified;

"air traffic services reporting office" means a unit provided by the appropriate authority either as a separate unit or combined with another unit, for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure;

"air traffic services unit" includes air traffic control unit, flight information centre and air traffic services reporting office;

"airborne collision avoidance system (ACAS)" means an aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders;

"airway" means a control area or portion thereof established by the appropriate ATS authority in the form of a corridor equipped with radio navigation aids;

"alerting service" means a service provided by the appropriate ATS authority to notify appropriate organisations regarding aircraft in need of search and rescue aid and to assist such organisations as required;

"alternate aerodrome" means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing and includes the following:

- (*a*) "take-off alternate aerodrome" an alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure,
- (b) "en-route alternate" an aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en-route and may include the aerodrome from which the aircraft departed,

(c) "destination alternate" - an alternate aerodrome to which an aircraft may proceed should it became impossible or inadvisable to land at the aerodrome of intended landing and may include the aerodrome from which the aircraft departed;

"alternate heliport" means a heliport specified in the flight plan to which a flight may proceed when it becomes inadvisable to land at the heliport of intended landing;

"altitude" means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL);

"anti-collision light" means:

- (a) in relation to rotorcraft, a flashing red light, and
- (b) in relation to other aircraft, a flashing red or flashing white light and, in either case showing in all directions for the purpose of enabling the aircraft to be more readily detected by pilots of distant aircraft;

"approach control unit" means a unit established by the appropriate ATS authority to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes;

"approach control service" means air traffic control service for arriving or departing controlled flights;

"appropriate ATS authority" means in relation to the State, the Authority and, in relation to any other state, the relevant authority designated by the state which has responsibility for the provision of air traffic services in the airspace concerned, and in relation to those parts of the high seas where, pursuant to a regional air navigation agreement, a state has accepted responsibility for the provision of air traffic services, the relevant authority designated by that state;

"appropriate authority" means in relation to the State, the Authority, and in relation to any other state, the relevant authority of the state having sovereignty over the territory being overflown, and in the case of flight over the high seas, the relevant authority of the state in which the aircraft concerned is registered;

"apron" means a defined area at a land aerodrome intended to accommodate aircraft for the purposes of loading or unloading passengers, mail or cargo or for fuelling, parking or maintenance;

"area control centre" means a unit established by the appropriate ATS authority to provide air traffic control service to controlled flights in control areas under its jurisdiction;

"area control service" means air traffic control service for controlled flights in control areas;

"area navigation" means a method of navigation which permits aircraft operation on any desired flight path within the coverage of station-referenced navigation aids or within the limits of the capability of self-contained aids, or a combination of these;

"area navigation route" means an ATS route established by the appropriate ATS authority for the use of aircraft capable of employing area navigation;

"ATC" means the symbol used to designate air traffic control;

"ATS" means the symbol used to designate air traffic services;

"ATS route" means a route specified by the appropriate ATS authority designed for channelling the flow of traffic as necessary for the provision of air traffic services (including an airway, an advisory route, a controlled or uncontrolled route, an arrival route or a departure route);

"Automatic Dependent Surveillance" (ADS) means a surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems, including aircraft identification, four-dimensional position and additional data as appropriate;

"attitude" means the angles made by the axes of an aircraft in flight or on the ground with the relative airflow or with the ground respectively;

"automatic terminal information service" means the provision of current, routine information to arriving and departing aircraft by means of continuous and repetitive broadcasts throughout the day or a specified part of the day;

"balloon" means a non-power-driven lighter-than-air aircraft;

"base turn" means a turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track, the tracks not being reciprocal;

"ceiling" means the height above the ground or water as the case may be of the base of the lowest layer of cloud which is below 6,000 metres (20,000 feet) covering more than half the sky;

"change-over point" means the point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft;

"clearance limit" means the point to which an aircraft is granted an air traffic control clearance;

"congested area" means in relation to a city, town or settlement, an area substantially used for residential, commercial or recreational purposes without adequate safe forced landing areas; "control area" means a controlled airspace extending upwards from a specified limit above the earth specified by the appropriate ATS authority;

"controlled aerodrome" means an aerodrome at which air traffic control service is provided by the appropriate ATS authority to aerodrome traffic;

"controlled airspace" means an airspace of defined dimensions designated by the appropriate ATS authority within which air traffic control service is provided In accordance with the airspace classifications in Rule 26 of this Schedule; controlled airspace is a generic term which covers ATS airspace of Classes A, B, C, D and E as described in Annex 11 to the Convention at section 2.6;

"controlled flight" means any flight which is subject to an air traffic control clearance;

"controller-pilot data link communications" (CPDLC) means a means of communication between controller and pilot using data link for ATC communications;

"control zone" means a controlled airspace extending upwards from the surface of the earth to an upper limit specified by the appropriate ATS authority;

"cruise climb" means an aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases;

"cruising level" means a level maintained during a significant portion of a flight;

"current flight plan" means the flight plan together with any changes caused by subsequent clearances;

"danger area" means an airspace of dimensions specified by the appropriate ATS authority within which activities dangerous to the flight of aircraft may exist at specified times;

"data link communications" means a form of communication intended for the exchange of messages via a data link;

"estimated off blocks time" means the estimated time at which an aircraft will commence movement associated with departure;

"estimated time of arrival" means for IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome;

"expected approach time" means the time at which an air traffic control unit expects that an arriving aircraft, following a delay, will leave the holding point to complete its approach for a landing; "filed flight plan" means the flight plan as filed with an air traffic service unit by the pilot or a designated representative, without any subsequent changes;

"flight crew member" means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;

"flight information centre" means a unit established by the appropriate ATS authority to provide flight information service and alerting service;

"flight information region" means an airspace of defined dimensions designated by the appropriate ATS authority within which flight information service and alerting service are provided;

"flight information service" means a service provided by the appropriate ATS authority for the purpose of giving advice and information useful for the safe and efficient conduct of flights;

"flight level" means a surface of constant atmospheric pressure which is related to a specific pressure datum of 1013.2 hectopascals (hPa) and is separated from other such surfaces by specific pressure intervals;

"flight plan" means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

"flight status" means an indication of whether or not a given aircraft requires special handling by air traffic services units or not;

"flight time" means the total time from the moment an aircraft first moves under its own or external power for the purpose of taking-off until the moment it comes to rest at the end of the flight;

"flight visibility" means the visibility forward from the cockpit of an aircraft in flight;

"glider" means a non-power-driven heavier-than-air aircraft deriving its lift in flight from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

"ground visibility" means the visibility at an aerodrome, as reported by an observer accredited by the appropriate authority;

"heading" means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid);

"heavier-than-air aircraft" means any aircraft deriving, its lift in flight chiefly from aerodynamic forces;

"height" means:

(a) the vertical distance of a level, a point, or an object considered as a point, measured from a specified datum,

(b) the vertical dimension of an object;

"helicopter" means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power driven rotors on substantially vertical axes;

"heliport" means an area of land water or structure used or intended to be used for the takeoff and landing of helicopters;

"holding point" means:

- (a) a specified location, identified by visual or other means, in the vicinity of which the position of an aircraft in flight is maintained in accordance with air traffic control clearances, or
- (b) on the manoeuvring area of an aerodrome, a location at which an aircraft is held before entering a runway;

"IFR" means the symbol used to designate the Instrument Flight Rules;

"IFR flight" means a flight conducted or obliged to be conducted in accordance with the Instrument Flight Rules;

"IMC" means the symbol used to designate Instrument Meteorological Conditions;

"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 an arrival route as defined by the appropriate ATS authority 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 Rules" means the Rules in Part IV of this Schedule;

"Instrument Meteorological Conditions" means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified in Rule 34 of this Order for Visual Meteorological Conditions;

"landing area" means that part of the movement area intended for the landing or take-off of aircraft;

"level" means the vertical position of an aircraft in flight and includes height, altitude or flight level;

"lighter-than-air aircraft" means any aircraft supported by its buoyancy in the air;

"manoeuvring area" means that part of an aerodrome used for the take-off, landing and taxiing of aircraft, excluding aprons;

"movement area" means that part of an aerodrome used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s);

"night" means the hours between the end of evening civil twilight and the beginning of morning civil twilight, or such other period between sunset and sunrise as may be specified by the appropriate authority. In or over the State, "night" shall be deemed to be, during the period beginning on the 1st day of April, and ending on the 30th day of September, the time between half an hour after sunset and half an hour before sunrise, and during the remainder of the year, the time between sunset and sunrise, and for the purpose of this definition sunset shall be determined at surface level;

"operator" means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation and who, in relation to any particular aircraft has at the relevant time the management of that aircraft;

"Performance Class 1" means, in relation to a helicopter, performance such that, in the 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, depending on when the failure occurs;

"Performance Class 2" means, in relation to a helicopter, performance such that in the case of critical power unit failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after take-off or after a defined point before landing, in which case a forced landing may be required;

"Performance Class 3" means, in relation to a helicopter, performance such that, in the case of power unit failure at any point in the flight profile, a forced landing must be performed;

"pilot-in-command" means the pilot designated by the operator of an aircraft, or in the case of general aviation, the registered owner of the aircraft, as being in command and charged with the safe conduct of a flight by that aircraft;

"pressure altitude" means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere as defined in Annex 8 to the Chicago Convention;

"problematic use of substances" means the use of one or more psychoactive substances by aviation personnel in a way that constitutes a direct hazard to the user or endangers the lives, health or welfare of others or causes or worsens an occupational, social mental or physical problem or disorder;

"power-unit" means a system of one or more engines and ancillary parts which are together necessary to provide thrust, independently of any other power-unit(s), but not including short period thrust producing devices;

"prohibited area" means airspace of defined dimensions designated by the appropriate authority above the land areas of the country or territorial waters thereof, within which the flight of aircraft is prohibited by such authority; "psychoactive substances" means alcohol, opoids, cannabinoids, sedatives and hypnotics, cocaine other psychostimulants, hallucinogens and volatile solvents, whereas coffee and tobacco are excluded;

"radiotelephony" means a form of radio communication primarily intended for the exchange of information in the form of speech;

"regional air navigation agreements" means agreements approved by the Council of the International Civil Aviation Organisation on the advice of regional air navigation meetings;

"repetitive flight plan" means a flight plan related to a series of frequently recurring, regularly operated individual flights with identical basic features, submitted by an operator for retention and repetitive use by air traffic services units;

"reporting point" means a specified geographical location in relation to which the position of an aircraft can be reported;

"restricted area" means an airspace of defined dimensions designated by the appropriate authority above the land areas of a country or the territorial waters thereof, within which the flight of aircraft is restricted by the appropriate authority in accordance with certain specified conditions;

"runway" means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft;

"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 centre line;

"runway-holding position" means a designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical or sensitive area at which taxiing aircraft or vehicles shall stop and hold, unless otherwise authorised by the aerodrome control tower to proceed.

"safety sensitive personnel" means persons who might endanger aviation safety if they perform their duties and functions improperly, including, but not limited to, flight and cabin crew members, aircraft maintenance personnel and air traffic controllers;

"safe forced landing" means an unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface or of no significant damage to property;

"SELCAL" means a system which permits the selective calling of individual aircraft over radio-telephone channels linking a ground station with an aircraft;

"signal area" means an area on an aerodrome used for the display of ground signals;

"special VFR flight" has the meaning assigned to it in Rule 34(4) of this Schedule;

"taxiing" means the movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing, and in the case of helicopters including air-taxiing, that is, operation over the surface of an aerodrome within a height band associated with ground effect and at speeds associated with taxiing;

"taxiway" means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another including rapid exit taxiway, that is, a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways;

"terminal control area" means a control area normally established by the appropriate ATS authority at the confluence of ATS routes in the vicinity of one or more major aerodromes;

"track" means the projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (whether true, magnetic or grid);

"traffic avoidance advice" means advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision;

"traffic information" means information issued by an air traffic services 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;

"transition altitude" means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

"unmanned free balloon" means a non-power-driven, unmanned, lighter-than-air aircraft in free flight;

"VFR" means the symbol used to designate the Visual Flight Rules;

"VFR flight" means a flight conducted in accordance with the Visual Flight Rules;

"visibility" for aeronautical purposes is the greater of:

- a) the greatest distance at which a black object of suitable dimensions, situated near the ground can be seen and recognised when observed against a bright background;
- b) the greatest distance at which lights in the vicinity of 1000 candelas can be seen and identified against an unlit background;

Note: The two distances above have different values in air of a given extinction coefficient and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR);

"Visual Meteorological Conditions" means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling equal to or better than the minima specified in Rule 34 of this schedule;

"VMC" means the symbol used to designate Visual Meteorological Conditions;

"way-point" means a specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation.

PART II

GENERAL FLIGHT RULES

Protection of Persons and Property

Rule

2. Negligent or Reckless Operation

An aircraft shall not be operated in a negligent or reckless manner so as to endanger life or property.

3. *Minimum heights*

- (1) Except as permitted by the appropriate authority or as hereinafter provided aircraft shall not be flown:
 - (a) over congested areas of cities, towns or settlements or over an assembly of persons, at less than:
 - (i) a height of 450 metres (1,500 ft) above the ground or water, or
 - (ii) a height of 300 metres (1,000 ft) above the highest obstacle within a radius of 600 metres from the aircraft, or
 - (iii) such other height as would permit, in the event of the failure of a power unit, a safe forced landing to be made,

whichever height is the greatest.

- (b) elsewhere:
 - (i) closer than 150 metres, (500 ft) to any person, vehicle, vessel or structure, or
 - (ii) at a height less than 150 metres (500 ft) above the ground or water,

- (i) such flights are made with the written consent of the Authority and of the organisers, if any, of the event and are in accordance with any conditions or limitations specified by the Authority, or
- (ii) the aircraft is passing by in the normal course of navigation and flying at a height in compliance with subparagraph (*a*) of this paragraph.
- (2) Subject to subparagraph (b) of this paragraph and subparagraph 6 (2) (a) of Rule 6 of these Rules, paragraph (1) (a) of this Rule shall not apply to a Performance Class 1 or Class 2 helicopter which is being flown without undue hazard to persons or property, except with the permission of the appropriate authority and in accordance with any conditions specified therein, a helicopter shall not be flown:
 - (a) over congested areas of cities, towns or settlements at less than:
 - (i) such height as would enable it, in the event of the failure of a power unit, to make a safe forced landing;
 - (ii) a height of 300m (1,000 feet) above the ground or water,

whichever height is the greater;

- (b) The Authority may, in the interest of safety, prescribe areas, routes, heights and flight visibility's for helicopter flights and a helicopter shall conform thereto.
- (3) Paragraph (1)(b) of this Rule shall not apply to:
 - (a) an aircraft while it is landing or taking-off in accordance with normal aviation practice at an aerodrome or heliport;
 - (b) an aircraft when it is in use for aerial application or aerial work with the permission of the Authority and is operated in accordance with any conditions or limitations specified with such a permission;
 - (c) a helicopter conducting training for life-saving operations or demonstrations of such operations;
 - (d) a glider while it is hill soaring;
 - (e) an aircraft flying with the permission of the Authority for the purpose of picking up or dropping tow ropes, banners or similar articles at an aerodrome.

- (4) Paragraph (1)(b)(ii) of this Rule shall not apply to aircraft practising approaches to landing at an aerodrome or heliport, or to gliders or balloons, if such flights are being conducted without causing undue hazard to persons or property.
- (5) Nothing in this Rule shall prohibit an aircraft from:
 - (a) (i) taking-off, landing or practising approaches to landing, or
 - (ii) flying for the purpose of checking navigational aids or procedures,

in accordance with normal aviation practice at an aerodrome or heliport within the State, or at an aerodrome or heliport in any other state, and without causing undue hazard to persons or property;

- (b) flying in such a manner as may be necessary for the purpose of saving life or as permitted by paragraph (3) of Rule 6 of this Order.
- (6) In the case of an aircraft practising approaches to landing at an aerodrome or heliport as mentioned in paragraph (4) of this Rule, such approaches shall be confined to the airspace customarily used by aircraft when landing or taking-off in accordance with normal aviation practice at that location.

4. Cruising Levels

- (1) The cruising-levels at which a flight or a portion of flight is to be conducted shall be in terms of:
 - (a) flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;
 - (b) altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.
- (2) When required by this Order to fly at a cruising level appropriate to track, the pilotin-command of an aircraft shall, subject to paragraph (3) of this Rule, conduct the flight at a cruising level in accordance with the Tables in this Rule, using the altimeter setting appropriate to the airspace in which the flight takes place.
- (3) Where prescribed by the appropriate ATS authority for flights under specific conditions above flight level 290 within designated airspace, a modified table of cruising levels based on a nominal vertical separation of less than 2,000 feet but not less than 1,000 feet shall be used.
- (4) In the table in this Rule "track" means magnetic track or, in polar areas of latitude higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authority, grid tracks as determined by a network

of lines parallel to the Greenwich meridian super-imposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

- (5) The Tables referred to in Rule 4 (2) above are applicable as follows:
 - (a) In areas where on the basis of regional air navigation agreements and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 metres (1,000 ft) is applied between flight levels (FL) from FL 290 to FL 410 inclusive:

TABLE OF CRUISING LEVELS Track (See Rule 4(2))

From 000 degrees to 179 degrees*

IFR Flights		VFR Flights	
Flight Level	Altitude (Feet)	Flight Level	Altitude (Feet)
-90	-	-	-
10	1,000	-	-
30	3,000	35	3,500
50	5,000	55	5,500
70	7,000	75	7,500
90	9,000	95	9,500
110	11,000	115	11,500
130	13,000	135	13,500
150	15,000	155	15,500
170	17,000	175	17,500
190	19,000	195	19,500
210	21,000	215	21,500
230	23,000	235	23,500
250	25,000	255	25,500
270	27,000	275	27,500
290	29,000		
310	31,000		
330	33,000		
350	35,000		
370	37,000		
390	39,000		
410	41,000		
450	45,000		
490	49,000		
etc.	etc.		

IFR Flights		VFR Flights	
Flight Level	Altitude (Feet)	Flight Level	Altitude (Feet)
0	-	-	-
20	2,000	-	-
40	4,000	45	4,500
60	6,000	65	6,500
80	8,000	85	8,500
100	10,000	105	10,500
120	12,000	125	12,500
140	14,000	145	14,500
160	16,000	165	16,500
180	18,000	185	18,500
200	20,000	205	20,500
220	22,000	225	22,500
240	24,000	245	24,500
260	26,000	265	26,500
280	28,000	285	28,500
300	30,000		
320	32,000		
340	34,000		
360	36,000		
380	38,000		
400	40,000		
430	43,000		
470	47,000		
510	51,000		
etc.	etc.		

From 180 degrees to 359 degrees*

(b) other areas:

TABLE OF CRUISING LEVELS Track (See Rule 4(2))

From 000 degrees to 179 degrees*

IED Flights		VED Flights	
		VFK Flights	
Flight Level	Altitude (Feet)	Flight Level	Altitude (Feet)
-90	-	-	-
10	1,000	-	-
30	3,000	35	3,500
50	5,000	55	5,500
70	7,000	75	7,500
90	9,000	95	9,500
110	11,000	115	11,500
130	13,000	135	13,500
150	15,000	155	15,500
170	17,000	175	17,500
190	19,000	195	19,500
210	21,000	215	21,500
230	23,000	235	23,500
250	25,000	255	25,500
270	27,000	275	27,500
290	29,000	300	30,000
330	33,000	340	34,000
370	37,000	380	38,000
410	41,000	420	42,000
450	45,000	460	46,000
490	49,000	500	50,000
etc.	etc.	etc.	etc.

IFR Flights		VFR Flights	
Flight Level	Altitude (Feet)	Flight Level	Altitude (Feet)
0	-	-	-
20	2,000	-	-
40	4,000	45	4,500
60	6,000	65	6,500
80	8,000	85	8,500
100	10,000	105	10,500
120	12,000	125	12,500
140	14,000	145	14,500
160	16,000	165	16,500
180	18,000	185	18,500
200	20,000	205	20,500
220	22,000	225	22,500
240	24,000	245	24,500
260	26,000	265	26,500
280	28,000	285	28,500
310	31,000	320	32,000
350	35,000	360	36,000
390	39,000	400	40,000
430	43,000	440	44,000
470	47,000	480	48,000
510	51,000	520	52,000
etc.	etc.	etc.	etc.

From 180 degrees to 359 degrees*

- * Unless otherwise prescribed in a particular area by the appropriate authority or authorities only on the basis of a regional air navigation agreement.
- (c) Authorisation for VFR flights to operate above FL 290 shall not be granted in areas where a vertical separation minimum of 300 metres (1,000 ft) is applied above Fl 290.

5. Dropping of persons and articles, aerial application and aerial work

- (1) No person or article shall be dropped from an aircraft in flight that might create a hazard to that person, other persons or property.
- (2) Nothing shall be dropped from an aircraft flying within the State save in accordance with permission given by the Authority and subject to any conditions and limitations contained in such permission.
- (3) Paragraph (2) of this Rule shall not apply to the dropping of articles by or with the authority of the pilot-in-command of the aircraft in the following circumstances:

- (a) the dropping of articles for the purpose of saving life;
- (b) the jettisoning, in the case of emergency, of fuel or other articles in the aircraft;
- (c) the dropping of ballast in the form of fine sand or water;
- (d) the dropping of articles solely for the purpose of navigating the aircraft in accordance with ordinary practice or with the provisions of this Order;
- *(e)* the dropping at an aerodrome in accordance with prescribed conditions of ropes, banners or similar articles towed by aircraft.
- (4) An aircraft shall not be used for aerial application or aerial work unless:
 - (a) the terms of the certificate of airworthiness issued or rendered valid in respect of that aircraft under the law of the state in which the aircraft is registered includes an authorisation for that purpose; and
 - (b) in accordance with paragraph (2) of this Rule a permission has been given that may impose a condition or conditions for ensuring that the aircraft and any article or material dropped from it do not endanger persons or property in the aircraft or elsewhere, and shall remain in force for the period specified in the permission unless previously revoked by the Authority.
- (5) For the purpose of this Rule, dropping includes projecting and lowering and aerial application.
- (6) Nothing in this Rule shall prohibit the lowering of any person, animal, article or material from a helicopter to the surface, if the certificate of airworthiness issued or rendered valid in respect of the helicopter under the law of the state in which it is registered authorises the use of the helicopter for that purpose.
- (7) This Rule shall not apply to the descent of persons by parachute from an aircraft.

6. Towing, Picking-up and Raising of Persons, Articles and Materials

- (1) Subject to this Rule, an aircraft in flight in or over the State shall not, by means external to the aircraft, tow any articles or pick up or raise any person, animal, article or material unless:
 - (a) (i) the certificate of airworthiness issued or rendered valid in respect of that aircraft under the law of the state in which the aircraft is registered authorises the use of the aircraft for that purpose, and
 - (ii) the aircraft complies with any conditions or limitations prescribed as applicable to such flights; or

- (b) The flight is made in accordance with permission given by the Authority and subject to any conditions or limitation contained in such permission.
- (2) (a) Except with the permission of the appropriate authority, a helicopter shall not fly at any height over the congested areas of cities, towns or settlements or over an open air assembly of persons at any time when a person, animal, article or material is suspended from a helicopter;
 - (b) A passenger shall not be carried in a helicopter at any time when a person, animal, article or material is suspended therefrom, other than a passenger who has duties to perform in connection with the person, animal, article or material or, a passenger who has been picked up or raised by means external to the helicopter, or a passenger who it is intended shall be lowered to the surface by such means.
- (3) Nothing in this Rule shall prohibit the picking-up or raising of any person, animal or article in an emergency or for the purpose of saving life, or at a demonstration of, or when training for either such purpose.

7. Descent of Persons by Parachute

- (1) A person shall not, except in case of emergency, descend by means of a parachute from an aircraft unless with the permission of the appropriate authority.
- (2) A person shall not, except in the case of emergency, descend by means of a parachute from an aircraft flying within the State, unless the descent is made in accordance with a permission given by the Authority or by an organisation authorised by the Authority to issue such a permission and subject to any conditions or limitations contained in such authorisation or permission, whether given by the Authority or by an authorised organisation.

8. Acrobatic Flight and Formation Flights

- (1) No aircraft shall be flown acrobatically so as to constitute a hazard to air traffic.
- (2) If acrobatic flight over any area has been prohibited by the appropriate authority, an aircraft shall not be flown in acrobatic flight over such area without the prior consent of such authority.
- (3) Aircraft within the State shall not be flown acrobatically over cities, towns, or settlements or over an open-air assembly of persons except with the permission of the Authority and subject to any conditions or limitations contained in such permission.
- (4) Aircraft within the State shall not be flown acrobatically within controlled airspace, except with the consent of the appropriate air traffic control unit.
- (5) Aircraft shall not be flown in formation except by pre-arrangement between the pilots-in-command of the aircraft taking part in the flight and, for formation flight in

controlled airspace in accordance with such conditions as are prescribed or notified by the appropriate ATS authority. The aircraft shall be flown in formation such that:

- (a) The formation operates as a single aircraft with regard to navigation and position reporting;
- (b) separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and break-away; and
- (c) a separation distance not exceeding 0.5 NM (1 km) laterally and longitudinally and 100 ft (30 metres) vertically from the flight leader shall be maintained by each aircraft.

9. Airspace Restrictions

- (1) Aircraft shall not be flown in airspace designated as a prohibited area or airspace in which there are flight restrictions, the particulars of which have been duly notified by the Authority, except in accordance with the conditions of the restrictions or by permission of the Authority.
- (2) The Authority may impose such restrictions as may be prescribed on the flying of aircraft over or in the vicinity of any district or place within the State and aircraft shall not fly in contravention of any such restrictions.
- (3) The Authority may prescribe prohibited areas of airspace within which the flight of aircraft is prohibited.
- (4) The Authority may prescribe danger areas of airspace within which the safety of aircraft cannot be assured.
- (5) Any restriction imposed under paragraphs (1), (2) and (3) of this Rule shall apply to such areas and for such periods as may be prescribed for the purposes of this Rule.

Avoidance of Collisions

10. Proximity

- (1) An aircraft shall not be operated in such proximity to other aircraft as to create a collision hazard.
- (2) Aircraft shall not be flown in formation except by pre-arrangement and, when in controlled airspace classified as Class A, B, C or D as described in Rule 26 of this Schedule, with the permission of the appropriate Air Traffic Control Unit.
- (3) Aircraft shall not be flown in formation over the congested areas of cities, towns or settlements or over an open-air assembly of persons within the State, save with the

permission of Authority and subject to any conditions or limitations contained in such permission.

11. Right of Way

- (1) General
 - (a) The aircraft that has the right-of-way shall maintain its heading and speed, but nothing in these Rules shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert a collision;
 - (b) An aircraft, which is obliged by these Rules to keep out of the way of another aircraft, shall avoid passing over or under the other, or crossing ahead of it, unless passing or crossing well clear and taking into account the effect of aircraft wake turbulence.
- (2) *Converging*. When two aircraft are converging at approximately the same altitude, the aircraft that has the other on its right shall give way, except as follows:
 - (a) power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons,
 - (b) airships shall give way to gliders and balloons,
 - (c) gliders shall give way to balloons,
 - (d) power-driven aircraft shall give way to aircraft which are seen to be towing other aircraft or objects.
- (3) (a) Approaching head-on

When two aircraft are approaching head-on or approximately so and there is danger of a collision, each shall alter its heading to the right;

(b) Right Hand Traffic Rule

Except when flying in controlled airspace and in accordance with instructions issued by the appropriate air traffic control unit, an aircraft which is flying within the State in sight of the ground and following a road, railway, canal or coastline, or any other line of landmarks, shall keep such line of landmarks on its left.

(4) Overtaking

- (a) An aircraft that is being overtaken has the right of way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear of the overtaken aircraft;
- (b) For the purpose of this Rule, an overtaking aircraft is an aircraft that approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, that is to say, that it is in such a position with reference to the other aircraft that at night it should be unable to see either the aircraft's left (port) or right (starboard) navigation lights.
- (5) Landing
 - (a) Aircraft in flight or operating on the ground or water shall give way to other aircraft landing or in the final stages of an approach to land;
 - (b) When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level but the latter shall not take advantage of this Rule to cut in front of another which is in the final stages of an approach to land or to overtake that aircraft;
 - (c) Notwithstanding subparagraph (b) of this paragraph, power-driven heavier than-air aircraft shall give way to gliders.
- (6) *Emergency Landing*. An aircraft that is aware that another is compelled to land shall give way to that other aircraft.
- (7) *Taking-off.* An aircraft about to take-off shall not attempt to do so until there is no apparent risk of collision with other aircraft. A taxiing aircraft on the manoeuvring area shall give way to aircraft taking-off or about to take-off.
- (8) *Surface movement of aircraft*. In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall apply:
 - (a) when two aircraft are approaching head-on, or approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear;
 - (b) when two aircraft are on a converging course, the one which has the other on its right shall give way;
 - (c) an aircraft which is being overtaken by another aircraft shall have the right-ofway and the overtaking aircraft shall keep well clear of the other aircraft.

(9) Taxiing on the Manoeuvring Area

- (a) An aircraft taxiing on the manoeuvring area shall stop and hold at all runway holding positions unless otherwise authorised by the aerodrome air traffic control unit. Note: runway holding position markings and related signs are described in Annex 14 to the Convention at Volume I 5.2.9 and 5.4.2;
- (b) An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.

12. Lights

- (1) In accordance with Part VI of this Schedule, aircraft shall display the following lights:
 - (a) Aircraft in flight or operating in the movement area by night

Except as provided for in paragraph (4) of this Rule, all aircraft in flight by night within the State or operating in the movement area of an aerodrome by night shall display:

- (1) anti-collision lights intended to attract attention to the aircraft, and
- (2) navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights.
- (b) Aircraft in flight or operating in the movement area on an aerodrome by day

Aircraft in flight or operating in the movement area by day shall display anticollision lights, if fitted;

(c) Aircraft when stationary on the Apron with power unit(s) running

Aircraft when stationary on the apron if a power-unit is operating, shall display a red anti-collision light, if fitted;

(d) Helicopters

When a helicopter is stationary with its rotor running on an offshore installation, heliport or apron for the purpose of the embarkation or disembarkation of passengers or the loading or unloading of cargo, it may switch off its anti-collision light in accordance with a procedure set out in the operations manual of the helicopter as a signal to ground personnel that it is safe to approach the helicopter.

- (2) Landing lights and searchlights, airframe and logo lights may be used in addition to the anti-collision lights to increase aircraft conspicuity.
- (3) Failure of navigation and anti-collision lights
 - (a) In the event of the failure of any light which is required to be displayed by this Rule, if the light cannot be immediately repaired or replaced the aircraft shall not depart from the aerodrome or heliport and, if in flight, shall land as soon as it can safely do so, unless authorised by the appropriate air traffic control unit to continue its flight;
 - (b) In the event of the failure of an anti-collision light when flying by day, an aircraft may continue to fly by day provided that the light is repaired at the earliest practicable opportunity.
- (4) Switching off or reducing intensity of aircraft lights
 - (a) Notwithstanding the provisions of this Rule the pilot-in-command of an aircraft may switch off or reduce the intensity of anti-collision lights or lights as described in (2) of this Rule, if it is likely that such light or lights will:
 - (i) adversely affect the satisfactory performance of the duties of any member of the flight crew,
 - (ii) subject an outside observer to unreasonable dazzle.

13. Simulated Instrument Flight

- (1) An aircraft shall not be flown under simulated instrument flight conditions unless:
 - (a) fully functioning dual controls are installed in the aircraft, and
 - (b) a pilot holding an appropriate licence occupies a control seat to act as safety pilot for the person who is flying in simulated instrument flight.
- (2) The safety pilot shall have adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot shall occupy a position in the aircraft from which the observer's field of vision adequately supplements that of the safety pilot.
- (3) Within the State an aircraft shall not carry out an instrument approach procedure when flying in Visual Meteorological Conditions unless:
 - (a) the flight has been notified to the appropriate air traffic control unit; and
 - (b) if the flight is being carried out as a simulated instrument flight, the provisions of subparagraph (a) and (b) of paragraph (1) of this Rule are complied with or, if the flight is not being carried out as a simulated instrument flight, a competent observer is carried in such a position in the aircraft that the observer

has an adequate field of vision and can readily communicate with the pilot-incommand thereof.

(4) In this Rule the expression "simulated instrument flight" means a flight during which any device is used in order to reduce the field of vision or the range of visibility from the cockpit of the aircraft.

14. Flight Instruction

Flight instruction and, in particular, authorisation for solo flying shall be such as to ensure that an aircraft piloted by a student pilot does not constitute a hazard to air navigation, persons or property.

15. Operation on and in the vicinity of an Aerodrome

- (1) An aircraft operated on or in the vicinity of an aerodrome shall, whether or not within an aerodrome traffic zone:
 - (a) observe other aerodrome traffic for the purpose of avoiding collision;
 - (b) conform with or, as may be appropriate, avoid the pattern of traffic formed by other aircraft in operation;
 - *(c)* make all turns to the left, when approaching for a landing and after taking-off unless otherwise authorised by the appropriate ATS authority or air traffic control unit;
 - (d) land and take-off into the wind, insofar as is practicable and consistent with consideration of safety or runway configuration or in accordance with instructions from, or signals displayed by the appropriate air traffic control unit;
 - *(e)* comply with any additional rules which may be prescribed or in the case of a state other than the State, specified by the appropriate ATS authority, as applicable in aerodrome traffic zones.
- (2) When an aerodrome control tower is in operation at an aerodrome, an aircraft forming part of the aerodrome traffic shall:
 - (a) maintain a continuous listening watch on the appropriate radio frequency of the aerodrome control tower unless the aerodrome is under the approach control service furnished by another air traffic control unit, or, if such watch is not possible, keep a watch for such instructions as may be issued by visual signals; and
 - (b) obtain, either by radio or by visual signals, prior authorisation for any manoeuvre preparatory to or associated with taxiing, landing or taking-off.

Water Operations

16. Risk of Collision

When two aircraft or an aircraft and a vessel are approaching one another on the water and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

17. Converging

An aircraft which has another aircraft or vessel on its right on the water shall give way so as to keep well clear.

18. Approaching head-on

An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.

19. Overtaking

An aircraft or vessel on the water which is being overtaken has right of way, and the aircraft overtaking shall alter its heading so as to keep well clear.

20. Landing or taking-off

Aircraft landing on or taking-off from the water shall, so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

21. Lights to be displayed by aircraft on the water

Between sunset and sunrise or such other period between sunset and sunrise as may be prescribed by the Authority, all aircraft on the water shall display lights of the types described in Part VI of this Schedule unless:

- (a) It is impractical for them to do so, in which case they shall display lights as closely similar as possible in characteristics and position to those required by the International Regulations for Preventing Collisions at Sea adopted by the Collision Regulations (Ships and Water Craft on the Water) Orders, 1984 to 1993;
- (b) They are within an area specifically exempted by the appropriate authority.
- **22.** Aircraft on the water shall, in addition to complying with Rules 16 to 21, have regard to the provisions of the Collision Regulations (Ships and Water Craft on the Water) Orders, 1984 to 1993 and amendments thereto where these provisions are applicable to aircraft on the water.

Information on Flights

23. Flight Plans

(1) Submission of Flight Plan

Information relative to an intended flight or portion of a flight, to be provided to an air traffic services reporting office before departure or to any other appropriate air traffic services unit during flight, shall be in the form of a flight plan.

(2) Requirement to submit a Flight Plan

A flight plan shall be submitted prior to operating:

- (a) any flight or portion thereof to be provided with air traffic control service;
- (b) any IFR flight within advisory airspace;
- (c) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services;
- (d) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate co-ordination with appropriate military units or with air traffic services units in adjacent states in order to avoid the possible need for interception for the purpose of identification;
- (e) any flight across international borders.
- (3) A flight plan shall also be submitted within the State, for any flight of which at least a total of 30 nautical miles is over water.
- (4) Except in the case of a filed repetitive flight plan or unless otherwise prescribed by the appropriate ATS authority, a flight plan shall be submitted at least sixty minutes before departure or such lesser time as may be agreed with the appropriate ATS authority or, if submitted during flight, at a time which will ensure its receipt by the appropriate air traffic services unit at least ten minutes before the aircraft is estimated to reach:
 - (i) the intended point of entry into controlled airspace or advisory airspace as the case may be;

or

- (ii) the point of crossing an airway or advisory route.
- (5) Contents of a Flight Plan

A flight plan shall comprise information on such of the items listed hereafter as are considered relevant by the appropriate air traffic services authority:

- Aircraft identification,
- Flight rules and type of flight,
- Number and type(s) of aircraft and wake turbulence category,
- Equipment,
- Aerodrome (or heliport) of departure,
- Estimated off blocks time (or if flight plan is submitted during flight, the time over the first point of the route to which the flight plan relates),
- Estimated times at flight information region boundaries,
- Cruising speed(s),
- Cruising level(s),
- Route to be followed,
- Destination aerodrome (or heliport) and estimated total elapsed time of flight,
- Alternate aerodrome(s) [or heliport(s)],
- Fuel endurance,
- Total number of persons on board,
- Emergency and survival equipment,
- Other information,
- Where it is intended to close the flight plan if same is at a point other than the aerodrome (or heliport) of destination.
- (6) Filing of a Flight Plan

Irrespective of the purpose for which it is submitted, a flight plan shall contain all relevant information on the list in paragraph (5) of this Rule, up to and including "Alternate Aerodrome(s)" for the whole route or for the portion of the route for which the flight plan is submitted.

It shall, in addition, contain information, as applicable, on all other items contained in the list in paragraph (5) of this Rule, when so prescribed by the appropriate ATS authority or when otherwise deemed necessary by the person submitting the flight plan.

- (7) *Changes to a Flight Plan*
 - (*a*) Subject to Rule 28(2), all changes to a flight plan submitted for an IFR flight or a controlled VFR flight and significant changes to a flight plan submitted for an uncontrolled VFR flight shall be reported as soon as practicable to the appropriate air traffic services unit;
 - (b) Information submitted prior to the time of departure concerning fuel endurance or the total number of persons on board which is incorrect at the actual time of departure constitutes a significant change in the flight plan and shall be so reported.

(8) Closing a Flight Plan

- (a) Within the State, whenever a flight plan has been submitted in respect of all or portion of a flight, it shall be closed either on termination of the flight or on completion of that portion of the flight for which the flight plan was submitted, such closure being effected by one of the methods outlined in paragraphs (9) to (12) of this Rule;
- (b) Outside the State flight plans shall be closed in accordance with the requirements of the appropriate ATS authority.
- (9) An arrival report in accordance with paragraph (13) of this Rule shall be made, either in person, by radio or telephone or via data link at the earliest possible moment after landing to the appropriate air traffic services unit at the aerodrome of arrival in respect of any flight for which a flight plan has been submitted covering the entire flight or the remaining portion of a flight to destination.
- (10) When communication facilities at the aerodrome of arrival are known to be inadequate and alternative arrangements for the handling of arrival reports on the ground are not available, the following action shall be taken:
 - (a) Immediately prior to landing the aircraft shall, if practicable, transmit by radio or via data link to an appropriate air traffic services unit a flight plan closure message in accordance with paragraph (14) of this Rule;
 - (b) Normally this transmission shall be made to the aeronautical station serving the air traffic services unit in charge of the flight information region in which the aircraft is flying, and an acknowledgement shall be received.
- (11) When a flight plan has been submitted only in respect of a portion of a flight other than the remaining portion of a flight to destination, it shall be closed by transmission of a flight plan closure message by radio or via data link to the appropriate air traffic services unit.
- (12) If it is not practicable to close the flight plan by the methods detailed as appropriate to paragraphs (10) or (11) of this Rule, or when no air traffic services unit exists at the aerodrome of arrival, the arrival report shall be made by telephone or other appropriate means of communication to the nearest air traffic services unit as soon as practicable after landing.
- (13) Arrival reports made by aircraft shall contain at least the following elements of information:
 - (a) aircraft identification;
 - (b) aerodrome of departure;
 - (c) time of arrival;
 - (d) aerodrome of arrival;
 - (e) destination aerodrome if different to (d) above.

- (14) A flight plan closure message shall contain at least the following elements of information:
 - (a) aircraft identification;
 - (b) aerodrome of departure;
 - (c) aerodrome of destination;
 - (d) position at which flight plan is being closed;
 - (e) time at which flight plan is being closed.

24. Signals

- (1) Upon observing or receiving any of the signals specified or provided for in Part V of this Schedule, aircraft shall take such action as may be required by the interpretation of the signal.
- (2) Subject to Rule 42 the signals specified or provided for in Part V of this Schedule shall be used only for the purpose indicated in that Part and no other signals likely to be confused with them shall be used.
- (3) A person in an aircraft shall not without lawful authority or excuse (the burden of proof whereof shall lie on such person) knowingly give any naval or military aircraft signals.

25. *Time*

Co-ordinated Universal Time (UTC) shall be used and shall be expressed in hours and minutes of the 24-hour day beginning at midnight. A time check shall be obtained prior to operating a controlled flight and at such other time during the flight as may be necessary. Whenever time is utilised in the application of data-link communications, it shall be accurate to within one second of UTC.

Note:

Time checks, given to the nearest half minute, are normally available from air traffic services units.

Classification of ATS Airspace

26. Airspace classifications and associated ATS Services provided

ATS airspaces shall be classified and designated in accordance with the following:

Class A: IFR flights only are permitted, all flights are subject to air traffic control service and are separated from each other.

Class B: IFR and VFR flights are permitted, all flights are subject to air traffic control service and are separated from each other.

Class C: IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights.

Class D: IFR and VFR flights are permitted and all flights are subject to air traffic control service. IFR flights are separated from other IFR flights and receive traffic information in respect of VFR flights. VFR flights receive traffic information in respect of all other flights.

Class E: IFR and VFR flights are permitted, IFR flights are subject to air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical.

Class F: IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested.

Class G: IFR and VFR flights are permitted and receive flight information service if requested.

Air Traffic Control Service

27. Air Traffic Control Clearance

- (1) Clearances issued by air traffic control units shall provide separation:
 - (a) between all flights in Class A and B airspaces;
 - (b) between IFR flights in Class C, D and E airspaces;
 - (c) between IFR flights and VFR flights in Class C airspace;
 - (d) between IFR flights and special VFR flights;
 - (e) between special VFR flights;

except that when requested by an aircraft and, if so prescribed by the appropriate ATS authority for the case listed under subparagraph (b) of this paragraph, a flight may be cleared without separation being so provided in respect of a specific portion of the flight conducted in Visual Meteorological Conditions in Class D or Class E airspace.

(2) Prior to operating a controlled flight or a portion of a flight as a controlled flight in controlled airspace, an air traffic control clearance shall be obtained by the pilot-in-

command from the appropriate air traffic control unit through the submission of a flight plan covering the flight or portion of the flight.

- (3) The clearance issued by an air traffic control unit may be limited to cover only a part of a current flight plan and this will be indicated by the inclusion of a reference to a clearance limit or by reference in the clearance to a particular manoeuvre such as taxiing, landing or take-off.
- (4) If an air traffic control clearance is not satisfactory to the pilot-in-command of an aircraft, he may request the appropriate air traffic control unit to amend the clearance and if practicable, to issue him with such amended clearance.
- (5) Whenever an aircraft has requested a clearance involving priority, a report explaining the necessity for such priority shall be submitted if requested by the appropriate air traffic control unit.
- (6) An aircraft operated on a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.

Adherence to and Changes to Flight Plan

- **28.** (1) (a) Subject to paragraph (2) of this Rule, a change shall not be made to the current flight plan or the applicable portion of a current flight plan submitted for a controlled flight unless a request for such change has been made to, and clearance obtained from, the appropriate air traffic control unit, or unless an emergency situation arises which necessitates immediate action by the aircraft and in such event, as soon as circumstances permit, after such emergency action is exercised, the appropriate air traffic services unit shall be notified of the action taken and if necessary a clearance shall be obtained therefrom for any change effected;
 - (b) Unless otherwise authorised or directed by the appropriate air traffic control unit, controlled flights shall, in so far as practicable:
 - (i) when on an established ATS route, operate along the defined centre line of that route, or
 - (ii) when on any other route, operate directly between the navigation facilities and/or points defining that route.

Deviation from the requirements in clauses (i) and (ii) of this subparagraph shall be notified to all appropriate air traffic services units;

- (c) Subject to the overriding requirements in subparagraph (b) of this Rule, an aircraft operating along an ATS route segment defined by reference to very high frequency omni-directional radio ranges shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of the aircraft at, or as close as operationally feasible to, the change-over-point, where established.
- (2) Inadvertent Changes

Where an aircraft when on a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken:

- (a) Deviation from Track. If the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;
- (b) Variation in True Airspeed. If the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus five per cent of the true airspeed, from that given in the flight plan, the appropriate air traffic services unit shall be so informed;
- (c) Change in Estimated Times. If the estimated time at the next applicable reporting point, flight information region boundary, or aerodrome of intended landing, (whichever comes first) is found to be in error in excess of three minutes from that notified to air traffic services, or by such other period of time as is prescribed by the appropriate ATS authority, or on the basis of regional air navigation agreements, a revised estimated time shall be notified as soon as possible to the appropriate air traffic services unit;
- (d) When an ADS agreement is in place, the air traffic services unit concerned shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

(3) *Intended Changes*

Requests for flight plan changes shall include information as indicated hereunder:

(a) Change of Cruising Level

Aircraft identification; requested new cruising level and cruising speed at this level; revised estimated time (when applicable) at subsequent flight information region boundaries;

(b) Change of Route

- (i) *Destination unchanged.* Aircraft identification; flight rules; description of new route of flight, including related flight plan data beginning with the time and position from which requested change of route is to commence; revised estimated time at destination; any other pertinent information,
- (ii) Destination changed. Aircraft identification; flight rules; description of new route of flight to new destination including related flight plan data, beginning with the time and position from which requested change of route is to commence; estimated time of arrival at new destination; alternate aerodrome(s); any other pertinent information.
- (4) Weather deterioration below VMC

When it becomes evident to the pilot-in-command of an aircraft being operated as a controlled VFR flight that flight in VMC in accordance with the current flight plan will not be practicable, he shall:

- (a) request an amended clearance to enable the aircraft to continue in VMC to destination or to an alternate aerodrome, or leave the controlled airspace concerned; or
- (b) if no clearance in accordance with subparagraph (a) of this paragraph can be obtained, continue to operate in VMC and notify the appropriate air traffic control unit of the action being taken either to leave the controlled airspace concerned or to land at the nearest suitable aerodrome; or
- (c) if operating in a control zone, request authorisation to operate as a special VFR flight; or
- (d) if appropriately qualified and the aircraft is appropriately equipped to comply with the Instrument Flight Rules, request clearance to operate in accordance with those rules.
- (5) Position Reports
 - (a) Unless exempted by the appropriate ATS authority for the provision of air traffic services in the airspace concerned, or by the appropriate air traffic services unit under conditions issued by that authority, a controlled flight shall report to the appropriate air traffic services unit by radio as soon as possible:
 - (i) the time and level of passing each designated compulsory reporting point, together with any other required information,
 - (ii) position reports shall similarly be made in relation to other additional reporting points when requested by the appropriate air traffic services unit,

- (iii) in the absence of designated reporting. points, position reports shall be made at intervals prescribed by the appropriate ATS authority for the provision of air traffic services in the airspace concerned or by the appropriate air traffic services unit;
- (b) If an aircraft is unable to communicate by radio, it shall comply with such reporting procedures as may be prescribed;
- (c) Controlled flights providing position information to the appropriate air traffic services unit via data-link communications shall only provide voice position reports when requested.

Arrival and Departure of Aircraft

- **29.** (1) If points between or over which aircraft, arriving. within the State from abroad or leaving the State for abroad shall pass have been prescribed, every aircraft arriving in the State from abroad or leaving the State for abroad shall, save as hereinafter provided, pass between or over such points.
 - (2) Where any aircraft is compelled by an obstacle thereto or by reason of weather conditions or unavoidable cause to enter the State from abroad elsewhere than between or over any such prescribed points such aircraft shall notify the appropriate air traffic services unit as soon as practicable.

Termination of Control

- (3) (a) The pilot-in-command of a controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate air traffic control unit as soon as the flight ceases to be subject to air traffic control service;
 - (b) A controlled flight operating in Visual Meteorological Conditions shall continue to be operated as a controlled flight unless otherwise authorised by the appropriate air traffic control unit.

30. Communications

- (1) An aircraft flown as a controlled flight shall maintain a continuous air-ground voice communication watch on the appropriate communication channel and establish twoway communication, as necessary, with the appropriate air traffic control unit, except in a case where the appropriate ATS authority has prescribed otherwise in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.
- (2) Where so prescribed by the appropriate ATS authority, the use of automatic signalling devices such as SELCAL, shall be deemed to satisfy the requirement to maintain a continuous listening watch.

- (3) The requirement for an aircraft to maintain air-ground voice communication watch remains in effect after CPDLC has been established.
- (4) An aircraft operating under IFR outside controlled airspace and required by the appropriate ATS authority to submit a flight plan and to maintain a continuous airground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service, shall report its position as required by Rule 28(5) of these Rules.

31. Communications Failure

- (1) Air/Ground
 - (a) If an aircraft fails to establish contact with an aeronautical station on the radio frequency designated by the appropriate authority, it shall attempt to establish contact on another frequency appropriate to the route being flown;
 - (b) If the said attempt fails, the aircraft shall attempt to establish communication with other aircraft or other aeronautical stations (including where applicable, ocean station vessels) and if operating within a radio communications network shall monitor the appropriate VHF frequency for calls from nearby aircraft;
 - (c) If the attempts set out in subparagraphs (a) and (b) fail, the aircraft shall transmit its message twice on the radio frequencies designated by the appropriate authority preceded by the phrase "Transmitting blind" and including the addressees for whom the message is intended;
 - (d) If the aircraft is operating within a radio communications network, a message preceded by the phrase "Transmitting blind" shall be transmitted twice on both the primary and secondary radio frequencies appropriate to the radio network, and before changing from one frequency to another the frequency to which the change is made shall be announced. To indicate that it is experiencing a radio failure, an aircraft equipped with a secondary surveillance radar (SSR) transponder shall operate the equipment on Mode A, Code 7600.
- (2) *Receiver failure*
 - (a) When an aircraft is unable to establish radio communication by reason of the failure of a radio receiver in the aircraft, it shall transmit reports at the times and positions on the frequency in use, as scheduled by the appropriate authority, preceded by the phrase "Transmitting blind due to receiver failure", and shall then transmit the intended message followed by a complete repetition of the transmission and including a reference to the time of its next intended transmission;

- (b) An aircraft which is being provided with air traffic control service or air traffic advisory service shall, in addition to complying with the provision of paragraph (1) of this Rule, transmit information conveying the intentions of the pilot-in-command concerning the continuation of the flight of the aircraft.
- (3) (a) If a radio communications failure precludes compliance with Rule 30, the aircraft shall, in addition to complying with such provisions of paragraphs (1) and (2) of this Rule as may be feasible and appropriate, comply with such of the other provisions of this paragraph as may be feasible and appropriate, and if forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for the observation of such instructions as may be issued by the aerodrome control tower by means of visual signals;
 - (b) If an aircraft is flying in Visual Meteorological Conditions, it shall continue to fly in Visual Meteorological Conditions to, and land at the nearest suitable aerodrome, and report its arrival to the appropriate air traffic control unit by the quickest means available.
- (4) If an aircraft is flying in Instrument Meteorological Conditions or in weather in which it does not appear feasible to complete the flight in compliance with the provisions of subparagraph (3)(b) of this Rule, the aircraft shall:
 - (a) unless otherwise prescribed on the basis of a regional air navigation agreement, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;
 - (b) proceed according to the current flight plan route to the appropriate designated navigational aid serving the destination aerodrome and hold over this aid until commencement of descent, when required to ensure compliance with subparagraph (c) of this paragraph;
 - (c) commence descent from the navigational aid specified in subparagraph (b) of this paragraph at, or as close as possible to, the expected approach time last received and acknowledged, or, if no expected approach time has been received and acknowledged, at, or as close as possible to the estimated time of arrival resulting from the current flight plan;
 - (d) complete a normal instrument approach procedure designated as appropriate for the said navigational aid; and
 - (e) land, if possible, within thirty minutes after the estimated time of arrival as indicated in the filed flight plan and revised in accordance with the current flight plan, or the last acknowledged expected approach time whichever is later.

32. Instrument Approach Procedure

An aircraft shall, unless otherwise authorised by the appropriate air traffic control unit, follow the normal instrument approach procedures for the aerodrome to be used.

33. Unlawful Interference

- (1) An aircraft which is being subjected to unlawful interference shall endeavour to notify the appropriate ATS unit of this fact, together with any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATS unit to give priority to the aircraft and to minimise conflict with other aircraft.
- (2) Aircraft equipped with an SSR transponder shall operate the equipment on Mode A, Code 7500, to indicate specifically that it is being subjected to unlawful interference unless the safety of the aircraft or its occupants dictates otherwise.
- (3) CPDLC equipped aircraft shall transmit the appropriate emergency message via CPDLC.
- (4) Where an aircraft which is being subjected to unlawful interference is unable to notify an ATS unit of the fact, the flight crew shall, where possible, proceed in accordance with attachment B to Annex 2 to the Chicago Convention.

PART III

VISUAL FLIGHT RULES

34. General Rules for VFR Flights

(1) Except when operating as a special VFR flight, VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in the following table:

* Airspace class		A**BCDE	FG	FG
			Above 900 metres	At and below 900 metres
			(3,000 ft) AMSL or	(3,000 ft) AMSL or 300
			above 300 metres	metres (1,000 ft) above
			(1,000 ft) above	terrain whichever is the
			terrain whichever is	higher
			the higher	
Distance		1,500 metres horizontally		Clear of cloud and in sight
from Cloud		300 metres (1,000 ft) vertically		of the surface
Flight	8	8 Kilometres at or above Flight Level		5 Kilometres *** (See
Visibility	1	100 or 10,000 ft AMSL		below)
	5	5 Kilometres below Flight Level 100		
	or 10,000 ft AMSL		SL	

* Note: See Rule 26 of these Rules.

- ** Note: VMC minima in Class A airspace are included for guidance to pilots but do not imply the acceptance by the ATS Unit responsible of a VFR flight in Class A airspace in a particular instance;
- *** Note: (a) 3 kms. Flight Visibility for aircraft operated at an indicated airspeed of 140 kts or less;
 - (b) lower flight visibilities to a minimum of 1500m may be permitted for aircraft operating:
 - (1) at speeds that, in the prevailing visibility will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision, or
 - (2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low level;
 - (c) A helicopter may be permitted to operate in less than 1500m flight visibility where a lower flight visibility is prescribed by the Authority, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.
- (2) If the aircraft is a helicopter operating in class F or G airspace it may, unless otherwise prescribed, be flown below 300 metres (1,000 ft), but not below 150 metres (500 ft), above terrain or water in a flight visibility of not less than 1,000 metres, or such lesser visibility as may be prescribed by the Authority, and in such case shall remain clear of cloud and in sight of the surface and shall be manoeuvred at a speed which would give the pilot-in-command adequate opportunity to observe other traffic or any obstruction in good time to avoid collision.
- (3) When within a control zone, an aircraft may be operated as and in meteorological conditions appropriate to a special VFR flight provided that the flight may be conducted in accordance with Rule 3 of these Rules.
- (4) In this Rule, a special VFR flight means a controlled flight authorised by the appropriate air traffic control unit to operate within a control zone:
 - (a) by day, in meteorological conditions which are lower than the Visual Meteorological Conditions but with a flight visibility not less than 1500m and clear of clouds and in sight of the surface, except in the case of a helicopter operating in accordance with Rule 3(2)(b) of these rules along a prescribed route or within a prescribed area where such are prescribed and where lower limits are prescribed relating thereto;

- (b)by night, in Visual Meteorological Conditions and in sight of the surface.
- (5) At an aerodrome within a control zone, special VFR flights shall not be authorised to land, take off, depart, cross the control zone or operate locally therein if the ground visibility within the control zone is less than 1500m and/or the reported cloud ceiling is less than 500 feet, except in the case of a helicopter operating in accordance with Rule 3(2)(b) of these rules, along a prescribed route or within a prescribed area where lower limits are prescribed.
- (6) Except when a special VFR clearance is obtained from an air traffic control unit, VFR flights shall not take-off or land at an aerodrome within a control zone or enter the aerodrome traffic zone or traffic pattern:
 - when the ceiling is less than 450 metres (1,500 ft); or (a)
 - *(b)* when the ground visibility is less than 5 km.
- (7)Except where otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority, VFR flights in level cruising flight when operated above 900 metres (3,000 ft) above the ground or water, or a higher datum as specified by the appropriate ATS authority, shall be conducted at a flight level appropriate to the track as specified in the table of cruising levels in Rule 4 of these Rules.
- (8) (i) VFR flights at night operated in a control zone shall be operated as special VFR flights subject to a clearance from the air traffic control unit responsible for that zone and elsewhere in accordance with the conditions prescribed by the Authority or, in any other state, the appropriate ATS authority;
 - (ii) Special VFR flights at night authorised in a control zone may only operate to or from aerodromes or heliports suitably equipped for night operations;
 - Flights by night outside a control zone shall be operated as IFR flights in (iii) accordance with Part IV of the Rules in this Order unless otherwise prescribed or authorised by the Authority.
- (9) Unless authorised by the appropriate ATS authority, VFR flights shall not be operated:
 - *(a)* above FL200;
 - *(b)* at transonic and supersonic speeds.
- (10) VFR flights which are operated within Classes B, C, and D airspace or as special VFR flights shall comply with the provisions of Rules 27 to 31.
- (11) A VFR flight operating within or into areas, or along routes, designated by the appropriate ATS authority in accordance with Rule 23 paragraph (2)(c) or (d), shall maintain continuous listening watch on the appropriate radio frequency of, and report its position as necessary to, the air traffic services unit providing flight information service.

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35. Change from VFR to IFR flight An aircraft operated in accordance with the Visual Flight Rules which wishes to change to compliance with the Instrument Flight Rules shall:

- (1) if a flight plan was submitted, inform the appropriate air traffic services unit of the necessary changes to be effected to its current flight plan, or
- (2) when so required by paragraph (2) of Rule 23 submit a flight plan to the appropriate air traffic services unit and obtain a clearance prior to proceeding in accordance with the Instrument Flight Rules when in controlled airspace.

PART IV

INSTRUMENT FLIGHT RULES

Rules applicable to all IFR flights

36. Aircraft equipment

Aircraft shall be equipped with suitable instruments and with radio and navigation equipment appropriate to the route and the airspace to be flown.

37. *Minimum Levels*

Without prejudice to the provisions of Rule 3 an IFR flight shall be flown at a level which is not lower than the minimum flight altitude established by the state whose territory is being overflown, except when necessary for taking-off or landing at an aerodrome, unless authorised by the appropriate authority, or, where no such minimum flight altitude has been established:

- (1) over high terrain or in mountainous areas, at a level which is at least 600 metres (2,000 ft) feet above the highest obstacle located within 8 km (5NM), of the estimated position of the aircraft.
- (2) elsewhere than as described in subparagraph (1) at a level which is at least 300 metres (1,000 ft) above the highest obstacle located within 8 km (5NM), of the estimated position of the aircraft.

In estimating the position of the aircraft for the purpose of compliance with this Rule, account shall be taken of the navigational accuracy which can be achieved on the relevant segment of the route being flown, having regard to the navigational facilities available on the ground and on board the aircraft.

38. Change from IFR flight to VFR flight

- (1) An aircraft electing to change the conduct of its flight from compliance with the Instrument Flight Rules to compliance with the Visual Flight Rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit that the IFR flight plan is cancelled and communicate thereto the changes to be made to its current flight plan.
- (2) When an aircraft operating under the Instrument Flight Rules is flown in or encounters Visual Meteorological Conditions it shall not cancel its IFR flight plan unless it is expected and intended that the flight will be continued for a reasonable period of time in uninterrupted Visual Meteorological Conditions.

39. Rules applicable to IFR flights within controlled airspace

- (1) IFR flights shall comply with the provisions of Rules 27 to 32 when operated in controlled airspace.
- (2) An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or, if authorised to employ cruise climb techniques, between two levels or above a level, selected from:
 - (a) the table of cruising levels in Rule 4; or
 - (b) a modified table of cruising levels when so prescribed in accordance with paragraph (3) of Rule 4 for flight above flight level 290, except that the correlation of levels to tracks prescribed therein shall not apply whenever otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority in Aeronautical Information Publications.

40. Rules applicable to IFR flights outside controlled airspace

Cruising Levels

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in:

- (a) the table of IFR cruising levels in Rule 4 except when otherwise authorised by the appropriate ATS authority for flight at or below 900 metres (3,000 ft) above mean sea level; or
- (b) a modified table of cruising levels when so prescribed in accordance with Rule 4(3) for flights above flight level 290, except that the correlation of levels to tracks shall not apply when using cruise climb techniques for supersonic flight.

41. Communications

- (1) An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority in accordance with Rule 23 (2), (c) and (d), shall maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.
- (2) An IFR flight operating outside controlled airspace shall comply with the provisions of Rule 28 (5) in respect of position reports.

PART V

SIGNALS

Distress, Urgency and Safety Signals

- **42.** None of the provisions of this Rule shall prevent the use by an aircraft in distress of any means at its disposal to attract attention, make known its position and obtain help:
 - (1) *Distress Signals*. The following signals, used either together or separately shall be used to indicate that grave and imminent danger threatens, and immediate assistance is requested:
 - (a) a signal made by radiotelegraphy or by any other signalling method consisting of the group SOS (... — … in the Morse Code);
 - (b) a signal sent by radiotelephony consisting of the spoken word "MAYDAY";
 - (c) A distress message sent via data link which transmits the intent of the word "MAYDAY";
 - (d) rockets or shells throwing red lights, fired one at a time at short intervals;
 - (e) a parachute flare showing a red light.
 - (2) Urgency Signals
 - (a) The following signals, used either together or separately, shall be used to indicate that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:
 - (i) the repeated switching on and off of the landing lights, or
 - (ii) the repeated switching on and off of the navigation lights in such a manner as to be distinct from flashing navigation lights;

- (b) The following signals used, either together or separately, shall be used to indicate that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight:
 - (i) a signal made by radiotelegraphy or by any other signalling method consisting of the group XXX,
 - (ii) a radiotelephony urgency signal consisting of the spoken words PAN, PAN,
 - (iii) an urgency message sent via data link which transmits the intent of the words "PAN, PAN";
- (c) An aircraft equipped with an appropriate data link capability and/or an SSR transponder may indicate that it is in a state of emergency by operating the equipment as follows:
 - (i) on SSR transponder Mode A, Code 7700, or
 - (ii) actuate the appropriate emergency ADS capability, or
 - (iii) transmit the appropriate emergency message via CPDLC.

Visual signals used to warn an unauthorised aircraft flying in, or about to enter a Restricted, Prohibited or Danger Area

- **43.** (1) By day and by night, a series of projectiles discharged at intervals of 10 seconds, each showing, on bursting, red and green lights or stars will indicate to an unauthorised aircraft that it is flying in or about to enter a restricted, prohibited or danger area, and that the aircraft is to take such remedial action as may be necessary.
 - (2) These signals may be emitted from the ground or from another aircraft.

Signals for the Control of Aerodrome Traffic

- **44.** (1) The light signals specified in paragraph (4) of this Rule shall be used, as appropriate, within the State at any aerodrome having an aerodrome control tower.
 - (2) When ground signals are displayed for the control of aerodrome traffic they shall be in accordance with the signals provided for in paragraph (5) of this Rule.
 - (3) The Authority may require the owner, manager or the person responsible for the operation of any licensed aerodrome within the State to display any or all of the ground signals provided for in paragraph (5) of this Rule, and such signals shall be displayed at such aerodrome to the extent so required.

Light Signals

(4) (a) The signals specified in the following Table, when made by an aerodrome control tower to aircraft in flight or on the ground, shall have the meanings respectively assigned to them and shall be interpreted as follows:

Light (Directed toward	From Aerodrome Control to:		
the aircraft concerned)	Aircraft in Flight	Aircraft on the ground	
Steady green	Cleared to land	Cleared for take-off	
Steady red	Give way to other aircraft and continue circling	Stop	
Series of green flashes	Return for landing*	Cleared to taxi	
Series of red flashes	Aerodrome unsafe, do not land	Taxi clear of landing area in use	
Series of white flashes	Land at this aerodrome and proceed to the apron*	Return to starting point on the aerodrome	
Red pyrotechnical	Notwithstanding any previous instructions, do not land for the time being		

* Clearances to land and to taxi will be given in due course.

(b) Acknowledgement by an aircraft

- (i) when in flight:
 - (A) during hours of daylight by rocking the wings of the aircraft,
 - (B) during hours of darkness by flashing on and off twice the landing lights of the aircraft or, if not so equipped, by switching on and off twice the navigation lights;

- (ii) when on the ground:
 - (A) during hours of daylight by moving the ailerons or rudder of the aircraft,
 - (B) During hours of darkness by flashing on and off twice the landing lights of the aircraft or, if not so equipped, by switching on and off twice the navigation lights.
- (5) *Visual Ground Signals*. The visual ground signals used at aerodromes for the control of aerodrome traffic shall be in accordance with directions issued from time to time.

Marshalling Signals

45. The signals to be used by signalmen when marshalling aircraft and by pilots of aircraft being marshalled shall be in accordance with directions issued from time to time.

PART VI

RULES FOR LIGHTS

46. Navigation Lights to be Displayed by Aeroplanes and Helicopters

- (1) For the purposes of this Rule:
 - (a) the longitudinal axis of an aeroplane or helicopter means a selected axis parallel to the direction of flight at a normal cruising speed and passing through the centre of gravity of the aeroplane or helicopter;
 - (b) the horizontal plane of an aeroplane or helicopter means the plane containing the longitudinal axis and perpendicular to the plane of symmetry of the aeroplane or helicopter.
- (2) The following lights shall be displayed by aeroplanes and helicopters in accordance with Rule 12:
 - (a) all aeroplanes and helicopters
 - (i) an unobstructed red light projected above and below the horizontal plane through an angle from dead ahead to 110 degrees left (port),
 - (ii) an unobstructed green light projected above and below the horizontal plane through an angle from dead ahead to 110 degrees right (starboard),

- (iii) an unobstructed white light projected above and below the horizontal plane rearward through an angle of 140 degrees equally distributed on the left (port) and right (starboard) sides;
- (b) Anti-collision lights as specified in paragraph (3) of this Rule shall be displayed by such aeroplanes and helicopters as may be prescribed.
- (3) The lights specified in paragraph (2)(*a*) of this Rule may be displayed either as steady lights or as flashing lights: provided that these lights shall be displayed as steady lights when an anti-collision light, being a flashing light or system of flashing lights fitted to the exterior of the aircraft and having such characteristics and in such a position or positions as the Authority may approve, is also displayed.
- (4) Wing tip clearance lights comprising steady lights of the colours specified for the navigation lights in subparagraph *(a)*(i) and (ii) of paragraph (2) of this Rule may be displayed if there are no navigation lights within 1.80 metres of the wing tips.
- (5) The lights specified in subparagraph (*a*)(i), (ii) and (iii) of paragraph (2) of this Rule shall be of such intensity as may be prescribed from time to time.

Lights to be displayed by aeroplanes on the water

- (6) For the purposes of this Rule:
 - (a) (i) An aeroplane on the surface of the water shall be taken to be under way when it is not aground or moored to the ground or to any fixed object on the ground or in the water,
 - (ii) An aeroplane on the surface of the water shall be taken to be under command when it is able to execute manoeuvres as required by these Rules or by the International Regulations for Preventing Collisions at Sea adopted by the Collision Regulations (Ships and Water Craft on the Water) Order, 1984, (amended by the Collision Regulations (Ships and Water Craft on the Water) (Amendment) Order, 1990)),
 - (iii) An aeroplane on the surface of the water shall be taken to be making way when it is under way and has a velocity relative to the water,
 - (iv) "Visible" when applied to the lights in this Rule means visible on a dark night with a clear atmosphere;
 - (b) An aeroplane under way shall display the lights described in paragraph (2)(a) appearing as steady lights and, in addition, a steady white light visible forward throughout a dihedral angle of 220 degrees bisected by a vertical plane through the longitudinal axis of the aeroplane, and visible for a distance of at least three nautical miles; except that:
 - (i) when towing another aircraft or vessel, an additional steady white light of the same construction and character as the aforesaid steady white

lights shall be displayed in a vertical line at least 6 feet above or below such light and a yellow light having otherwise the same characteristics as the light defined in 2(a)(iii) and mounted in a vertical line at least 6 feet above it,

- (ii) when being towed, only the steady lights described in paragraph (2)(*a*) shall be displayed,
- (iii) (A) when not under command and not making way, two steady red lights shall be displayed, one vertically over the other and not less than 3 feet apart, and of such a character as to be visible all round the horizon at a distance of at least 2 nautical miles,
 - (B) when making way but not under command the lights described in (6)(b)(iii)(A) above, and the lights described in paragraph 2(a) shall be displayed,
- (iv) the display of lights as prescribed in paragraph (iii) shall be interpreted by other aircraft as a signal that the aeroplane displaying them is not under command and cannot get out of the way, and these lights shall not be taken to be a signal of distress from an aeroplane requiring assistance.
- (c) When an aeroplane is at anchor on the surface of the water:
 - (i) if less than 50 metres in length it shall display where it can best be seen a steady white light visible all round the horizon from at least 2 nautical miles,
 - (ii) if 50 metres or more in length, it shall display where they can best be seen a steady white forward light and a steady white rear light, both visible all round the horizon from at least 3 nautical miles,
 - (iii) if 50 metres or more in span a steady white light shall be displayed on each side to indicate the maximum span such lights being visible so far as practicable all round the horizon from at least one nautical mile;
- (d) When aground, an aeroplane shall display the lights described in (c) and in addition two steady red lights in vertical line, at least 3 feet apart, so placed as to be visible all round the horizon.

47. Lights to be Displayed by Aircraft other than Aeroplanes and Helicopters

Aircraft other than aeroplanes and helicopters shall display such lights as may be prescribed.

UNMANNED FREE BALLOONS

48. Operation of unmanned free balloons

The operation of unmanned free balloons shall be such as to minimise hazard to persons, property and other aircraft and shall be subject to the prior permission of the appropriate authority and shall be conducted in accordance with the terms of such permission, or in accordance with directions issued from time to time.

The classification and operating requirements for unmanned free balloons shall be in accordance with Appendix 4 to Annex 2 to the Chicago Convention.

Given under the common seal of the Irish Aviation Authority this 20th day of February, 2004.



Anne Lait Director

Donal Downing Director

EXPLANATORY NOTE

(This Note is not part of the Order and does not purport to be a legal interpretation)

- 1. The Order revokes, re-enacts and consolidates with modifications and additions, the Irish Aviation Authority (Rules of the Air) Orders 2001 to 2002.
- 2. It gives effect to the Standards in Annex 2 and certain Standards in Annex 11 to the Chicago Convention.
- 3. The principal modifications, apart from minor editorial amendments, are:
 - the introduction of revised definitions (Rule 1);
 - revised provisions in respect of parachuting activities (Rule 7);
 - incorporation of the amended Note to Table of Rule 34 in one Order;
 - addition of an amendment to Rule 33 on unlawful interference.