GIBRALTAR
CIVIL AVIATION AUTHORITY

CAR OPS 0

RULES OF THE AIR

FOREWORD

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FOREWORD

1. The Gibraltar Civil Aviation Authority is known in these operating regulations as the "Authority".

2. CAR OPS 0 addresses Rules of the Air and includes Standards and Recommended Practices up to and including ICAO Annex 2, Amendment 48.

3. The gazette published version is available on https://www.gibraltarlaws.gov.gi under operating regulations.

4. The editing practices used in this document are as follows:

   (a) 'Shall' is used to indicate a mandatory requirement whereby non-compliance may be considered an offence under Section 59 of the Civil Aviation Act – 2024 and may be enforced under the provisions of Section 58.

   (b) 'Should' is used to indicate a recommendation by the Authority and has no legal effect.

   (c) 'May' is used to indicate discretion by the Authority, the industry or the applicant, as appropriate.

   Note: The use of the male gender implies all genders.

5. Paragraphs and sub-paragraphs with new, amended and corrected text will be enclosed within square brackets until a subsequent amendment is issued.

6. Unless otherwise stated, the definitions and abbreviations contained in CAR DEF are applicable to these regulations.

The Director General, in exercise of the powers conferred by Section 34 of the Civil Aviation Act – 2024, hereby issues these operating regulations.

REVISION RECORD

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CHAPTER 1

APPLICABILITY OF THE RULES OF THE AIR

OPS 0.005 Application of Rules of the Air

(a) These regulations shall apply, without exception, to all civil aircraft bearing the nationality and registration marks of Gibraltar, wherever they may be, to the extent that they do not conflict with the rules published by the State having jurisdiction over the territory over-flown.

(b) Each person operating a civil aircraft of Gibraltar registry over the high seas shall comply with these regulations.

(c) The Authority, as regards aircraft of its registration, has agreed that, for purposes of flight over those parts of the high seas where a Contracting State has accepted, pursuant to a regional air navigation agreement, the responsibility of providing air traffic services, the "appropriate ATS authority" referred to in this chapter is the relevant authority designated by the State responsible for providing those services.

OPS 0.010 Compliance with the Rules of the Air

The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with these regulations and, in addition, when in flight, either with:

(a) the Visual Flight Rules, or

(b) the Instrument Flight Rules.

Note: A pilot may elect to fly in accordance with instrument flight rules in visual meteorological conditions or may be required to do so by the appropriate ATS.

OPS 0.015 Responsibility for Compliance

(a) **Responsibility of Pilot in Command**

The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with these regulations.

(b) **Deviation from Regulations**

The pilot in command may depart from a civil aviation regulation in circumstances that render such departure absolutely necessary in the interests of safety. The pilot in command shall submit a written report to the Authority within 24 hours.

(c) **Pre-flight Action**

Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of the aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned.

OPS 0.020 Obstruction of Crew or Authorised Persons

(a) A person shall not intentionally obstruct or impede any person acting in the exercise of his powers or the performance of his duties under these CARs.

(b) No person shall assault, threaten, intimidate, or interfere with a crew member in the performance of the crew member's duties aboard an aircraft being operated.

OPS 0.035 Authority of Pilot in Command

The pilot in command of an aircraft shall have final authority as to the disposition of the aircraft while in command.

CHAPTER 2

GENERAL

OPS 0.100 Applicability

(a) **General**

(1) This chapter prescribes regulations governing the operation of civil aircraft registered in Gibraltar.

(2) The Authority may issue a waiver authorising deviation(s) from of any regulation(s) outlined herein if it finds that the proposed operation can be safely conducted under the terms of that waiver.

(b) **Extra-territorial Effect of the CARs**

Except where the context otherwise requires, the provisions of these CARs;

(1) in so far as they apply (whether by express reference or otherwise) to aircraft registered in Gibraltar, shall apply to such aircraft wherever they may be;

(2) in so far as they apply as aforesaid to other aircraft shall apply to such other aircraft when they are within Gibraltar territory, and

(3) in so far as they prohibit, require or regulate (whether by express reference or otherwise) the doing of anything by persons in, or by any of the crew of, any aircraft registered in Gibraltar, shall apply to such persons and crew, wherever they may be.

OPS 0.105 Irregular, Negligent or Reckless Operations

(a) Negligent or Reckless Operations

No person shall operate an aircraft or a remotely piloted aircraft in a negligent or reckless manner so as to endanger the life or property of others.

(b) Flights over any Foreign Country

(1) If a Gibraltar operator allows any aircraft owned or leased by that holder to be engaged in any operation known to be in violation of any national law, regulation or standard of Gibraltar, such operation is a basis for suspending or revoking the operating authority.

(2) The operator or pilot-in-command of an aircraft registered in Gibraltar which is being flown over any foreign country shall not allow that aircraft to be used for a purpose which is prejudicial to the security, public order or public health of, or to the safety of air navigation in relation to, that country.

(3) The operator or pilot-in-command of an aircraft registered in Gibraltar which is being flown over any foreign country shall comply with any directions given by the appropriate aeronautical authorities of that country whenever:

(i) the flight has not been duly authorised; or

(ii) there are reasonable grounds for the appropriate aeronautical authorities to believe that the aircraft is being or will be used for a purpose which is prejudicial to the security, public order or public health of, or to the safety of air navigation in relation to, that country; unless the lives of persons on board or the safety of the aircraft would thereby be endangered.

OPS 0.110 Minimum Heights

Except when necessary for take-off or landing, or except by permission from the Authority, aircraft shall not be flown over a congested area of cities, towns or settlements or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.

OPS 0.115 Cruising Levels

The cruising levels at which a flight or portion of a flight is to be conducted shall be in terms of:

(a) flight levels, for flights at or below 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

OPS 0.120 Dropping or Spraying

Nothing shall be dropped or sprayed from an aircraft in flight except under conditions prescribed by the Authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

OPS 0.125 Towing

No person shall operate an aircraft towing any object, including a glider, unless that person has been issued a written authorisation from the Authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

OPS 0.130 Parachute Descents

Except in emergency, no pilot in command shall allow, and no person shall make, a parachute jump from an aircraft within Gibraltar except under conditions prescribed by the Authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

OPS 0.135 Aerobatic Flight

No aircraft shall be flown acrobatically except under conditions prescribed by the Authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

OPS 0.140 Formation Flights

(a) No person shall operate an aircraft in formation flight except with approval of the Authority.

(b) No person shall operate an aircraft, carrying passengers for hire, in formation flight.

(c) Aircraft shall not be flown in formation except by pre-arrangement amongst the pilots in command of the aircraft taking part in the flight and, for formation flight in controlled airspace, in accordance with the conditions prescribed by the appropriate ATS authority(ies). These conditions shall include the following:

(1) the formation operates as a single aircraft with regard to navigation and position reporting;

(2) 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

(3) a distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 m (100 feet) vertically from the flight leader shall be maintained by each aircraft.

OPS 0.145 Remotely Piloted Aircraft and Unmanned Free Balloons

A remotely piloted aircraft and an unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft and in accordance with the conditions specified by the Authority.

Note: The conditions specified by the Authority will include those specified in OPS 0.260 and CAR OPS 4 for RPA greater than 25 kg and CAR OPS 6 for RPA of 25 kg or less and unmanned free balloons.

OPS 0.150 Prohibited Areas and Restricted Areas

Aircraft shall not be flown in a restricted area, or in a prohibited area, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

OPS 0.155 Avoidance of Collisions

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 collision.

Note: It is important that vigilance for the purpose of detecting potential collisions be exercised on board an aircraft, regardless of the type of flight or the class of airspace in which the aircraft is operating, and while operating on the movement area of an aerodrome.

OPS 0.160 Proximity

An aircraft shall not be operated in such proximity to another aircraft as to create a collision hazard.

OPS 0.165 Right of Way Rules

(a) General

(1) The aircraft that has right of way shall maintain its heading and speed.

(2) An aircraft that is obliged by the following rules to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effects of aircraft wake turbulence.

(b) Airborne Operations

(1) Approaching Head-On. When two aircraft are approaching head-on, or approximately so and there is a danger of collision, each aircraft shall alter course to the right.

(2) Converging. When aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, except as follows,

(i) Power-driven aircraft heavier than air aircraft shall give way to airships, gliders and balloons;

(ii) Airships shall give way to gliders and balloons;

(iii) Gliders shall give way to balloons;

(iv) Power-driven aircraft shall give way to aircraft, which are seen to be towing, or externally carrying, other aircraft or objects.

(3) Overtaking. An overtaking aircraft is an aircraft that approaches another from the rear of a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, i.e. is in such a position with reference to the other aircraft that at night it should be unable to see either of the aircraft's left (port) or right (starboard) navigation lights. 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 overtaking aircraft from this obligation until it is entirely past and clear.

(4) Landing.

(i) An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of approach to land.

(ii) 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 on final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to gliders

(5) Emergency Landing. An aircraft that is aware that another is compelled to land shall give way to that aircraft.

(6) Taking Off. An aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft taking off or about to take off.

(c) 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:

(1) Approaching Head-On. 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;

(2) Converging. When two aircraft are on a converging course, the one which has the other on its right shall give way;

(3) Overtaking. An aircraft which is being overtaken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear of the other aircraft.

(4) An aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless otherwise authorised by the aerodrome control tower.

(5) 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.

(d) Water Operations

(1) When two aircraft or an aircraft and a vessel are approaching one another 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.

(2) In case of danger of collision between aircraft or vessels, the following shall apply:

(i) Converging. An aircraft, which has another aircraft or a vessel on its right shall give way so as to keep well clear.

(ii) 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.

(iii) Overtaking. The aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.

(iv) Landing and Taking Off. Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

(3) Between sunset and sunrise, all aircraft on water shall display lights as required by the International Regulations for Preventing Collisions at Sea unless 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.

Note: Refer to Appendices to ICAO Annex 6, Part I or Part II for lighting specifications.

OPS 0.170 Lights to be Displayed by Aircraft

(a) Lights to be displayed by aircraft shall be in accordance with Appendix 4.

(b) Except as provided in paragraph (f) below, from sunset to sunrise or during any other period, which may be prescribed by the appropriate authority, all aircraft in flight 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.

(c) Except as provided in paragraph (f) below, from sunset to sunrise or during any other period prescribed by the appropriate authority:

(1) all aircraft moving on the movement area of an aerodrome shall display 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;

(2) unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure;

(3) all aircraft operating on the movement area of an aerodrome shall display lights intended to attract attention to the aircraft; and

(4) all aircraft on the movement area of an aerodrome whose engines are running shall display lights, which indicate that fact.

(d) Except as provided in paragraph (f), below, all aircraft in flight and fitted with anti-collision lights to meet the requirement sub-paragraph (b)(1) above, shall also display such lights outside the period specified in paragraph (b)

(e) Except as provided by paragraph (f) below, all aircraft:

(1) operating on the movement area of an aerodrome and fitted with anti-collision lights to meet the requirement of sub-paragraph (c)(3); or

(2) on the movement area of an aerodrome and fitted with lights to meet the requirement of sub-paragraph (c)(4);

shall display such lights also outside the period specified in paragraph (c).

(f) A pilot shall be permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirements of paragraphs (b) through (d) above, if they do or are likely to:

(1) adversely affect the satisfactory performance of duties; or

(2) subject an outside observer to harmful dazzle.

OPS 0.175 Simulated Instrument Flights

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 qualified pilot occupies a control seat to act as safety pilot for the person who is flying under simulated instrument conditions. 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 his field of vision adequately supplements that of the safety pilot.

OPS 0.180 Operation on and in the Vicinity of an Aerodrome

(a) An aircraft operated on or in the vicinity of an aerodrome shall, whether or not within an aerodrome traffic zone:

(1) observe other aerodrome traffic for the purpose of avoiding collision;

(2) conform with or avoid the pattern of traffic formed by other aircraft in operation;

(3) make all turns to the left, when approaching for a landing and after taking off, unless otherwise instructed;

(4) land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable.

(b) Flight within 2 nautical miles of Gibraltar Airport

(1) An aircraft shall not fly, take-off or land within 2 nautical miles of the boundary of Gibraltar Airport unless the commander of the aircraft has obtained permission of the Gibraltar air traffic control unit to enable the flight to be conducted safely within that area.

(2) The commander of an aircraft flying within 2 nautical miles of Gibraltar Airport shall;

(i) maintain a continuous watch on the appropriate radio frequency notified for communications at Gibraltar Airport; or

(ii) if this is not possible, cause a watch to be kept for such instructions as may be issued by visual means; and

(iii) if the aircraft is fitted with means of communication by radio with the ground, communicate his position and height to the Gibraltar air traffic control unit on entering and immediately prior to leaving that area.

(3) Sub-paragraphs (1) and (2) apply whenever Gibraltar air traffic control unit is notified as active.

OPS 0.185 Flight Plans

Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan.

(c) Requirement to Submit a Flight Plan

A flight plan shall be submitted prior to operating:

(1) any flight or portion thereof to be provided with air traffic control service;

(2) any IFR flight within advisory airspace;

(3) 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.

(4) 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 ATS units in adjacent States in order to avoid the possible need for interception for the purpose of identification;

(5) any flights across international borders;

Note: The term "flight plan" is used to mean variously, full information on all items comprised in the flight plan description, covering the whole route of a flight, or limited information required when the purpose is to obtain a clearance for a minor portion of a flight such as to cross an airway, to take off from, or to land at a controlled aerodrome.

(d) Submission of a Flight Plan

(1) Unless otherwise prescribed by the appropriate ATS authority, a flight plan shall be submitted before departure to an ATS reporting office or, during flight, transmitted to the appropriate ATS unit or air-ground control radio station.

(2) Unless otherwise prescribed by the appropriate ATS authority, a flight plan for a flight to be provided with air traffic control service or air traffic advisory service shall be submitted at least 60 minutes before departure, 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 a control area or advisory area; or

(ii) the point of crossing an airway or advisory route.

(e) Contents of the Flight Plan

A flight plan shall comprise information regarding such of the following items as are considered relevant by the appropriate ATS authority:

(1) Aircraft identification.

(2) Flight rules and type of flight.

(3) Number and type(s) of aircraft and wake turbulence category.

(4) Equipment.

(5) Departure aerodrome.

(6) Estimated off-block time.

(7) Cruising speed(s).

(8) Cruising level(s).

(9) Route to be followed.

(10) Destination aerodrome and total estimated elapsed time.

(11) Alternate aerodrome(s).

(12) Fuel endurance.

(13) Total number of persons on board.

(14) Emergency and survival equipment.

(15) Other information as requested by ATS (e.g. SELCAL code).

Note 1: For flight plans submitted during flight, the information provided in respect of this item will be an indication of the location from which supplementary information concerning the flight may be obtained, if required.

Note 2: For flight plans submitted during flight, the information to be provided in respect of this item will be the time over the first point of the route to which the flight plan relates.

Note 3: The term "aerodrome" where used in the flight plan is intended to cover also sites other than aerodromes which may be used by certain types of aircraft, e.g. helicopters or balloons.

(f) Completion of a Flight Plan

(1) Whatever the purpose for which it is submitted, a flight plan shall contain information, as applicable, on relevant items up to and including "Alternate aerodrome(s)" regarding the whole route or the portion thereof for which the flight plan is submitted.

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

(g) Changes to a Flight Plan

Subject to the provisions of CAR OPS 0.210, all changes to a flight plan submitted for an IFR flight, or a VFR flight operated as a controlled flight, shall be reported as soon as practicable to the appropriate air traffic services unit. For other VFR flights, significant changes to a flight plan shall be reported as soon as practicable to the appropriate air traffic services unit.

Note: Information submitted prior to departure regarding fuel endurance or total number of persons carried on board, if incorrect at time of departure, constitutes a significant change to the flight plan and as such must be reported.

(h) Closing a Flight Plan

(1) Unless otherwise prescribed by the appropriate ATS authority, a report of arrival shall be made either in person, by radiotelephony or via data link at the earliest possible moment after landing, to the appropriate ATS unit at the arrival aerodrome, by any flight for which a flight plan has been submitted covering the entire flight or the remaining portion of a flight to the destination aerodrome.

(2) 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, when required, be closed by an appropriate report to the relevant ATS unit.

(3) When no ATS unit exists at the arrival aerodrome, the arrival report, when required, shall be made as soon as practicable after landing and by the quickest means available to the nearest ATS unit.

(4) When communications facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available the following action shall be taken. Immediately prior to landing the aircraft shall, if practicable, transmit to the appropriate ATS unit, a message comparable to an arrival report, where such report is required. Normally, this transmission shall be made to the aeronautical station serving the ATS unit in charge of the FIR in which the aircraft is operated.

(5) Arrival reports made by aircraft shall contain the following elements of information:

(i) aircraft identification;

(ii) departure aerodrome;

(iii) destination aerodrome (only in case of a diversionary landing);

(iv) arrival aerodrome;

(v) time of arrival.

Note: Whenever an arrival report is required, failure to comply with these provisions may cause serious disruption in the air traffic services and incur great expense in carrying out unnecessary search and rescue operations.

(g) An aircraft shall not change the type of its radiotelephony call sign during flight, except temporarily on the instruction of an air traffic control unit in the interests of safety.

OPS 0.190 Signals

(a) Upon observing or receiving any of the signals given in CAR OPS 0, Appendix 1, aircraft shall take such action as may be required by the interpretation of the signal.

(b) The above signals shall, when used, have the meaning indicated therein. They shall be used only for the purpose indicated and no other signals likely to be confused with them shall be used.

(c) A signalman shall be responsible for providing standard marshalling signals to aircraft in a clear and precise manner using the signals shown in CAR OPS 0, Appendix 1.

(d) No person shall guide an aircraft unless trained, qualified and approved by the appropriate authority to carry out the functions of a signalman.

(e) The signalman shall wear a distinctive fluorescent identification vest to allow the flight crew to identify that the signalman is the person responsible for the marshalling operation.

(f) Daylight-fluorescent wands, table-tennis bats or gloves shall be used for all signalling by all participating ground staff during daylight hours. Illuminated wands shall be used at night or in low visibility.

OPS 0.195 Time

(a) Co-ordinated Universal Time shall be used and shall be expressed in hours, and minutes and, when required, seconds of the 24 hour day beginning at midnight.

(b) A time check shall be obtained prior to operating a controlled flight and at such other times during the flight as may be necessary.

Note: Such time check is normally obtained from an air traffic services unit unless other arrangements have been made by the operator or by the appropriate ATS authority.

(c) Whenever time is utilized in the application of data link communications, it shall be accurate to within 1 second of UTC.

OPS 0.200 Air Traffic Control Clearances

(a) An air traffic control clearance shall be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight. Such clearance shall be requested through the submission of a flight plan to an Air Traffic Control unit.

Note 1: A flight plan may cover only part of a flight, as necessary, to describe that portion of the flight or those manoeuvres which are subject to air traffic control. A clearance may cover only part of a current flight plan, as indicated in a clearance limit or by reference to specific manoeuvres such as taxiing, landing or taking off.

Note 2: If an air traffic control clearance is not satisfactory to a pilot-in-command of an aircraft, the pilot-in-command may request an amended clearance.

(b) When an ATC clearance has been obtained, no pilot in command may deviate from that clearance, except in an emergency, unless he obtains an amended clearance. If a pilot is uncertain of the meaning of an ATC clearance, he shall immediately request clarification from ATC.

(c) If prior to departure it is anticipated that depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate Air Traffic Control units shall be so notified by the insertion in the flight plan of information concerning the revised route (where known) and the revised destination.

Note: The intent of this provision is to facilitate a re-clearance to a revised destination, normally beyond the filed destination aerodrome.

(d) Except in an emergency, no person shall, in an area in which air traffic control is exercised, operate an aircraft contrary to an ATC instruction.

(e) Each pilot in command who deviates, in an emergency, from an ATC clearance or instruction shall notify ATC of that deviation as soon as possible.

(f) 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 ATC unit.

(g) 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.

(h) Each pilot in command who deviates from an ATC clearance or instruction, or any regulation shall upon the request of ATC or the Authority, submit a detailed written report of that emergency deviation within 48 hours to the Authority.

OPS 0.205 Adherence to Flight Plan

(a) Except as provided in CAR OPS 0.220, an aircraft shall adhere to the current flight plan or the applicable portion of a current flight plan for a controlled flight within the tolerances defined in CAR OPS 0.205(b) to CAR OPS 0.210 unless a request for a change has been made and clearance obtained from the appropriate ATC facility, or unless an emergency situation arises which necessitates immediate action by the pilot in command, in which event as soon as circumstances permit, after such emergency authority is exercised, the appropriate ATC facility shall be notified of the action taken and that this action has been taken under emergency authority.

(b) Unless otherwise authorised by the appropriate ATS authority, or directed by the appropriate air traffic control unit, controlled flights shall, in so far as practicable:

(1) when on an established ATS route, operate along the defined centre line of that route; or

(2) when on any other route, operate directly between the navigation facilities and/or points defining that route.

(c) Subject to the overriding requirement in paragraph (b) above, 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 it at, or as close as operationally feasible to, the change-over point, where established.

(d) Deviation from the requirements in paragraph (b) above shall be notified to the appropriate ATS unit

OPS 0.210 Deviations from the Current Flight Plan

(a) In the event that a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken:

(1) 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 practical.

(2) Deviation from ATC assigned Mach number/indicated airspeed: the appropriate air traffic control services unit shall be informed immediately.

(3) Deviation from Mach number/true airspeed: if the sustained Mach number/true airspeed at cruising level varies by plus or minus Mach 0.02 or more, or plus or minus 19 km/h (10 kt) true airspeed or more from the current flight plan, the appropriate air traffic services unit shall be so informed.

(4) Change in time estimate: except where ADS-C is activated and serviceable in airspace where ADS-C services are provided, if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, changes in excess of two minutes from that previously notified to ATC, or such other period of time as prescribed by the appropriate ATS authority or on the basis of regional air navigation agreements, the flight crew shall notify the appropriate air traffic services unit as soon as possible.

(b) When ADS-C services are provided and ADS-C is activated, the ATS unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

OPS 0.215 Change Requests

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

(a) Change of cruising level. Aircraft identification; requested new cruising level and cruising Mach number/true airspeed at this level; revised time estimates (when applicable) at subsequent reporting points or flight information region boundaries.

(b) Change of Mach number/true airspeed: Aircraft identification; requested Mach number/true airspeed.

(c) Change of route (destination unchanged). Aircraft identification; flight rules, description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates, and any other pertinent information.

(d) Change of route (change of destination). Aircraft identification; flight rules, description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence; revised time estimates, alternate aerodrome(s), and any other pertinent information.

OPS 0.220 Weather Deterioration Below VMC

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

(a) request an amended clearance enabling the aircraft to continue in VMC to destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required, or

(b) if no clearance in accordance with subparagraph (a) above, can be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome, or

(c) if operated within a control zone, request authorisation to operate as a Special VFR flight; and

Note: Refer to Chapter 3.

(d) request clearance to operate in accordance with the Instrument Flight Rules.

OPS 0.225 Position Reports

(a) Unless exempted by the appropriate ATS authority or by the appropriate ATS unit under conditions specified by that authority, a controlled flight shall report to the appropriate ATS unit, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any required information. Position reports shall similarly be made in relation to additional points when requested by the appropriate ATS unit. In the absence of designated reporting points, position reports shall be made at intervals prescribed by the appropriate ATS or specified by the appropriate ATS unit.

(b) Controlled flights providing information to the appropriate ATS unit via data link communications shall only provide voice position reports when requested.

OPS 0.230 Termination of Control

A controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to ATC service.

OPS 0.235 Communications

(a) An aircraft, operated as a controlled flight, shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and establish two-way communications as necessary with, the air traffic control unit, except as may be prescribed by the appropriate ATS authority in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.

Note 1: SELCAL or similar automatic signalling devices satisfy the requirement to maintain an air-ground voice communication watch. A prior SELCAL check should be conducted.

Note 2: The requirement for an aircraft to maintain an air-ground voice communication watch remains in effect after CPDLC has been established.

(b) Full radiotelephony call signs shall always be used when establishing communication.

(c) Inter-pilot air-to-air communication shall be established on the air-to-air channel 123.45 MHz by either a directed call to a specific aircraft station or a general call, taking into account conditions pertaining to use of this channel.

(d) As the aircraft may be guarding more than one frequency, the initial call should include the distinctive channel identification “INTERPILOT”.

(e) Abbreviated radiotelephony call signs shall be used only after satisfactory communication has been established and provided that no confusion is likely to arise. An aircraft station shall use its abbreviated call sign only after it has been addressed in this manner by the aeronautical station.

(f) After contact has been established, continuous two-way communication shall be permitted without further identification or call until termination of the contact.

(g) In order to avoid any possible confusion, when issuing ATC clearances and reading back such clearances, controllers and pilots shall always add the call sign of the aircraft to which the clearance applies.

(h) As the aeronautical station operator generally guards more than one frequency, the call should be followed by an indication of the frequency used, unless other suitable means of identifying the frequency are known to exist.

(i) During flight, aircraft stations shall maintain watch as required by the appropriate Authority and shall not cease watch, except for reasons of safety, without informing the aeronautical station(s) concerned.

(j) Aircraft on long over-water flights, or on flights over designated areas over which the carriage of an emergency locator transmitter (ELT) is required, shall continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

(k) Aircraft shall continuously guard the VHF emergency frequency 121.5 MHz in areas or over routes where the possibility of interception of aircraft or other hazardous situations exist, and a requirement has been established by the appropriate Authority.

(l) Aircraft on flights other than those specified in paragraphs (j) and (k) should guard the emergency frequency 121.5 MHz to the extent possible.

(m) The user of the air-to-air VHF communications channel shall ensure that adequate watch is maintained on designated ATS frequencies, the frequency of the aeronautical emergency channel, and any other mandatory watch frequencies.

(n) Aircraft stations shall operate on the appropriate radio frequencies.

(o) Aircraft stations shall, if possible, communicate directly with the air-ground control radio station appropriate to the area in which the aircraft are flying. If unable to do so, aircraft stations shall use any relay means available and appropriate to transmit messages to the air-ground control radio station.

OPS 0.240 Communication Failure

(a) If a communication failure precludes compliance with CAR OPS 0.235, the aircraft shall comply with the voice communication failure procedures of ICAO Annex 10, Volume II, and with such of the following procedures as are appropriate. The aircraft shall attempt to establish communications with the appropriate air traffic control unit using all other available means. In addition, the aircraft, when forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for such instructions as may be issued by visual signals.

(b) VMC Conditions. If the failure occurs in visual meteorological conditions, or if VMC conditions are encountered after the failure, the aircraft shall continue to fly in VMC; land at the nearest suitable aerodrome; and report its arrival by the most expeditious means to the appropriate ATC unit. If considered advisable, complete an IFR flight in accordance with paragraph (c) below.

(c) IMC Conditions. If the failure occurs in IMC, or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with paragraph (b) above, the aircraft shall:

(1) unless otherwise prescribed on the basis of 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;

(2) in airspace where radar is used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 minutes following:

(i) the time the last assigned level or minimum flight altitude is reached;

(ii) the time the transponder is set to Code 7600; or

(iii) the aircraft's failure to report its position over a compulsory reporting point;

whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan;

(3) when being radar vectored or having been directed by ATC to proceed offset using RNAV without a specified limit, re-join the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;

(4) proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with (5) below, hold over this aid or fix until commencement of descent;

(5) commence descent from the navigation aid or fix specified in sub-paragraph (4) 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;

(6) complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and

(7) land, if possible, within 30 minutes after the estimated time of arrival specified in sub-paragraph (5) or the last acknowledged expected approach time, whichever is later.

Note: The provision of air traffic control service to other flights operating in the airspace concerned will be based on the premise that an aircraft experiencing communication failure will comply with CAR OPS 0.240(c).

OPS 0.245 Unlawful Interference

(a) An aircraft, which is being subjected to unlawful interference, shall endeavour to notify the appropriate ATS unit of this fact, and 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.

(b) If an aircraft is subjected to unlawful interference, the pilot-in-command shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise.

(c) The following procedures are intended as guidance for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact.

(1) If the pilot-in-command cannot proceed to an aerodrome in accordance with paragraph (b) above, he/she should attempt to continue flying on the assigned track and at the assigned cruising level at least until able to notify an ATS unit or until within radar or ADS-B coverage.

(2) When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:

(i) attempt to broadcast warnings on the VHF channel in use or the VHF emergency frequency, and other appropriate channels, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders and data links should also be used when it is advantageous to do so and circumstances permit; and

(ii) proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in the *Regional Supplementary Procedures* (ICAO Doc 7030); or

(iii) if no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight by:

(A) 150 m (500 ft) in an area where a vertical separation minimum of 300 m (1 000 ft) is applied; or

(B) 300 m (1 000 ft) in an area where a vertical separation minimum of 600 m (2 000 ft) is applied.

Note: Action to be taken by an aircraft which is intercepted while being subject to an act of unlawful interference is prescribed in OPS 0.250.

OPS 0.250 Interception

(a) Interception of civil aircraft shall be governed by the Civil Aviation Act in compliance with the Chicago Convention.

(b) The pilot in command of a civil aircraft, when intercepted, shall comply with interpreting and responding to visual signals provisions as specified in CAR OPS 0, Appendix 1, Section 2.

(c) The pilot in command of a civil aircraft, when intercepted, shall immediately;

(1) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1;

(2) notify, if possible, the appropriate air traffic services unit;

(3) attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz;

(4) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

(5) if equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if available, unless otherwise instructed by the appropriate air traffic services unit.

(d) If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

(e) If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

OPS 0.255 Altimeter Setting Procedure

In order to comply with the instrument flight rules, an aircraft when in level flight above 3000 feet above mean sea level or above the appropriate transition altitude, whichever is the higher, shall be flown at a level appropriate to its magnetic track, in accordance with the appropriate table set forth below. The level of flight shall be measured by an altimeter set;

(a) in the case of a flight over Gibraltar, to a pressure setting of 1013.2 hectopascals; or

(b) in the case of any other flight, according to the system published by the competent authority in relation to the area over which the aircraft is flying;

provided that an aircraft may be flown at a level other than the level required by this regulation if it is flying in conformity with instructions given by an air traffic control unit or in accordance with notified en-route holding patterns or in accordance with holding procedures notified in relation to an aerodrome.

Note: For the purposes of this rule 'transition altitude' means the altitude so notified in relation to flight over such area or areas as may be notified.

OPS 0.260 Remotely Piloted Aircraft

(a) A remotely piloted aircraft system (RPAS) with a maximum take-off mass exceeding 25 kg, engaged in international air navigation, shall be operated in accordance with CAR OPS 4.

(b) A remotely piloted aircraft system (RPAS) with a maximum take-off mass of 25 kg or less, shall be operated in accordance with CAR OPS 6.

OPS 0.265 Unmanned Free Balloons
(See Appendix 1 to OPS 0.265)

(a) **Classification of Unmanned Free balloons**

Unmanned free balloons shall be classified as:

(1) *light:* an unmanned free balloon which carries a payload of one or more packages with a combined mass of less than 4 kg, unless qualifying as a heavy balloon in accordance with (3) (ii), (iii) or (iv) below; or

(2) *medium:* an unmanned free balloon which carries a payload of two or more packages with a combined mass of 4 kg or more, but less than 6 kg, unless qualifying as a heavy balloon in accordance with (3) (ii), (iii) or (iv) below; or

(3) *heavy:* an unmanned free balloon which carries a payload which:

(i) has a combined mass of 6 kg or more; or

(ii) includes a package of 3 kg or more; or

(iii) includes a package of 2 kg or more with an area density of more than 13 g per square centimetre; or

(iv) uses a rope or other device for suspension of the payload that requires an impact force of 230 N or more to separate the suspended payload from the balloon.

Note: The area density referred to in (3) (iii) is determined by dividing the total mass in grams of the payload package by the area in square centimetres of its smallest surface.

(b) **General Operating Rules**

(1) An unmanned free balloon shall not be operated without appropriate authorisation from the State from which the launch is made.

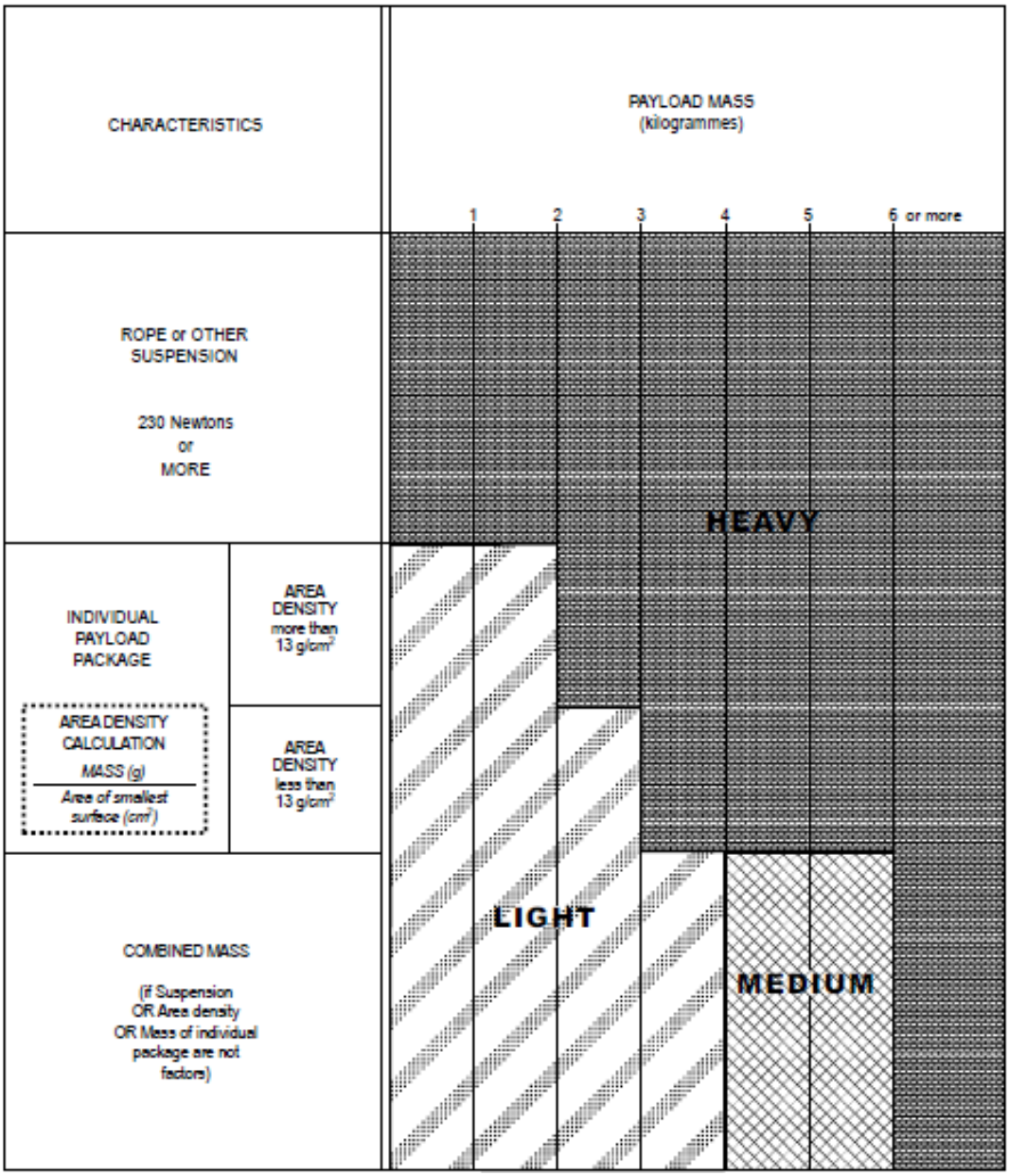
(2) An unmanned free balloon, other than a light balloon used exclusively for meteorological purposes and operated in the manner prescribed by the appropriate authority, shall not be operated across the territory of a State without appropriate authorisation from the State concerned.

(3) The authorisation referred to in (2) shall be obtained prior to the launching of the balloon if there is reasonable expectation, when planning the operation, that the balloon may drift into airspace over the territory of a State. Such authorisation may be obtained for a series of balloon flights or for a particular type of recurring flight, e.g. atmospheric research balloon flights.

(4) An unmanned free balloon shall be operated in accordance with conditions specified by the State of Registry in Appendix 1 to OPS 0.265 and the State(s) expected to be overflown.

(5) An unmanned free balloon shall not be operated in such a manner that impact of the balloon, or any part thereof, including its payload, with the surface of the earth, creates a hazard to persons or property not associated with the operation.

(6) A heavy unmanned free balloon shall not be operated over the high seas without prior coordination with the appropriate ATS authority.



Classifications of Unmanned Free Balloons

OPS 0.270 Communicable Diseases

(a) The pilot-in-command of an aircraft shall ensure that a suspected communicable disease is reported promptly to air traffic control, in order to facilitate provision for the presence of any special medical personnel and equipment necessary for the management of public health risks on arrival.

(b) The report to air traffic control should include transmission of the following information;

(1) Aircraft identification;

(2) Departure aerodrome;

(3) Destination aerodrome;

(4) Estimated time of arrival;

(5) Number of persons on board;

(6) Number of suspected case(s) on board; and

(7) Nature of the public health risk, if known.

Note 1: A communicable disease may be suspected and require further evaluation if a person has certain combined signs or symptoms: e.g. fever (temperature 38°C/100°F or greater), appearing obviously unwell; persistent coughing; impaired breathing; persistent diarrhoea; persistent vomiting; skin rash; bruising or bleeding without previous injury; or, confusion of recent onset.

Note 2: In the event of a case of suspected communicable disease on board an aircraft, the pilot-in-command is required to follow the operator's protocols and procedures, in addition to health-related legal requirements of the countries of departure and/or destination. The latter would normally be found in the Aeronautical Information Publications (AIPs) or Notice to Airmen (NOTAM) of the States concerned.

Appendix 1 to OPS 0.265
Unmanned Free Balloon Operations

1. Operating Limitations and Equipment Requirements

1.1 A heavy unmanned free balloon shall not be operated without authorisation from the appropriate ATS authority at or through any level below 18000 m (60000 ft) pressure-altitude at which:

(a) there are clouds or obscuring phenomena of more than four oktas coverage; or

(b) the horizontal visibility is less than 8 km.

1.2 A heavy or medium unmanned free balloon shall not be released in a manner that will cause it to fly lower than 300 m (1000 ft) over the congested areas of cities, towns or settlements or an open-air assembly of persons not associated with the operation.

1.3 A heavy unmanned free balloon shall not be operated unless:

(a) it is equipped with at least two payload flight-termination devices or systems, whether automatic or operated by telecommand, that operate independently of each other;

(b) for polyethylene zero-pressure balloons, at least two methods, systems, devices, or combinations thereof, that function independently of each other are employed for terminating the flight of the balloon envelope;

Note: Super pressure balloons do not require these devices as they quickly rise after payload discharge and burst without the need for a device or system designed to puncture the balloon envelope. In this context a super pressure balloon is a simple non-extensible envelope capable of withstanding a differential of pressure, higher inside than out. It is inflated so that the smaller night-time pressure of the gas still fully extends the envelope. Such a super pressure balloon will keep essentially constant level until too much gas diffuses out of it.

(c) the balloon envelope is equipped with either a radar reflective device(s) or radar reflective material that will present an echo to surface radar operating in the 200 MHz to 2 700 MHz frequency range, and/or the balloon is equipped with such other devices as will permit continuous tracking by the operator beyond the range of ground-based radar.

1.4 A heavy unmanned free balloon shall not be operated under the following conditions:

(a) in an area where ground-based SSR equipment is in use, unless it is equipped with a secondary surveillance radar transponder, with pressure-altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station; or

(b) in an area where ground-based ADS-B equipment is in use, unless it is equipped with an ADS-B transmitter, with pressure-altitude reporting capability, which is continuously operating or which can be turned on when necessary by the tracking station.

1.5 An unmanned free balloon that is equipped with a trailing antenna that requires a force of more than 230 N to break it at any point shall not be operated unless the antenna has coloured pennants or streamers that are attached at not more than 15 m intervals.

1.6 A heavy unmanned free balloon shall not be operated below 18000 m (60000 ft) pressure-altitude between sunset and sunrise or such other period between sunset and sunrise (corrected to the altitude of operation) as may be prescribed by the appropriate ATS authority, unless the balloon and its attachments and payload, whether or not they become separated during the operation, are lighted.

1.7 A heavy unmanned free balloon that is equipped with a suspension device (other than a highly conspicuously coloured open parachute) more than 15 m long shall not be operated between sunrise and sunset below 18000 m (60000 ft) pressure-altitude unless the suspension device is coloured in alternate bands of high conspicuity colours or has coloured pennants attached.

2. Termination

The operator of a heavy unmanned free balloon shall activate the appropriate termination devices required by 1.3 (a) and (b) above:

(a) when it becomes known that weather conditions are less than those prescribed for the operation;

(b) if a malfunction or any other reason makes further operation hazardous to air traffic or to persons or property on the surface; or

(c) prior to unauthorised entry into the airspace over a State's territory.

3. Flight notification

3.1 Pre-flight notification

3.1.1 Early notification of the intended flight of an unmanned free balloon in the medium or heavy category shall be made to the appropriate air traffic services unit not less than seven days before the date of the intended flight.

3.1.2 Notification of the intended flight shall include such of the following information as may be required by the appropriate air traffic services unit:

(a) balloon flight identification or project code name;

(b) balloon classification and description;

(c) SSR code, aircraft address or NDB frequency, as applicable;

(d) operator's name and telephone number;

(e) launch site;

(f) estimated time of launch (or time of commencement and completion of multiple launches);

(g) number of balloons to be launched and the scheduled interval between launches (if multiple launches);

(h) expected direction of ascent;

(i) cruising level(s) (pressure-altitude);

(j) the estimated elapsed time to pass 18000 m (60000 ft) pressure-altitude or to reach cruising level if at or below 18000 m (60000 ft), together with the estimated location;

Note: If the operation consists of continuous launchings, the time to be included is the estimated time at which the first and the last in the series will reach the appropriate level (e.g. 122136Z–130330Z).

(k) the estimated date and time of termination of the flight and the planned location of the impact/recovery area. In the case of balloons carrying out flights of long duration, as a result of which the date and time of termination of the flight and the location of impact cannot be forecast with accuracy, the term "long duration" shall be used.

Note: If there is to be more than one location of impact/recovery, each location is to be listed together with the appropriate estimated time of impact. If there is to be a series of continuous impacts, the time to be included is the estimated time of the first and the last in the series (e.g. 070330Z–072300Z).

3.1.3 Any changes in the pre-launch information notified in accordance with 3.1.2 above shall be forwarded to the air traffic services unit concerned not less than 6 hours before the estimated time of launch, or in the case of solar or cosmic disturbance investigations involving a critical time element, not less than 30 minutes before the estimated time of the commencement of the operation.

3.2 Notification of launch

Immediately after a medium or heavy unmanned free balloon is launched the operator shall notify the appropriate air traffic services unit of the following:

(a) balloon flight identification;

(b) launch site;

(c) actual time of launch;

(d) estimated time at which 18000 m (60000 ft) pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below 18000 m (60000 ft), and the estimated location; and

(e) any changes to the information previously notified in accordance with 3.1.2 (g) and (h).

3.3 Notification of cancellation

The operator shall notify the appropriate air traffic services unit immediately when it is known that the intended flight of a medium or heavy unmanned free balloon, previously notified in accordance with 3.1, has been cancelled.

4. Position recording and reports

4.1 The operator of a heavy unmanned free balloon operating at or below 18000 m (60000 ft) pressure-altitude shall monitor the flight path of the balloon and forward reports of the balloon's position as requested by air traffic services. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 2 hours.

4.2 The operator of a heavy unmanned free balloon operating above 18000 m (60000 ft) pressure-altitude shall monitor the flight progress of the balloon and forward reports of the balloon's position as requested by air traffic services. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 24 hours.

4.3 If a position cannot be recorded in accordance with 4.1 and 4.2, the operator shall immediately notify the appropriate air traffic services unit. This notification shall include the last recorded position. The appropriate air traffic services unit shall be notified immediately when tracking of the balloon is re-established.

4.4 One hour before the beginning of planned descent of a heavy unmanned free balloon, the operator shall forward to the appropriate ATS unit the following information regarding the balloon:

(a) the current geographical position;

(b) the current level (pressure-altitude);

(c) the forecast time of penetration of 18000 m (60000 ft) pressure-altitude, if applicable;

(d) the forecast time and location of ground impact.

4.5 The operator of a heavy or medium unmanned free balloon shall notify the appropriate air traffic services unit when the operation is ended.

CHAPTER 3

VISUAL FLIGHT RULES

OPS 0.300 Applicability

All aircraft operating under visual flight rules shall comply with this chapter.

Note: The information and data concerning the Gibraltar Civil Aviation Authority and the air space above its territory is stated in the Aeronautical Information Publications (A.I.P.).

OPS 0.305 Flights Under Visual Flight Rules

(a) 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 the clouds equal to or greater than those specified in Table 1.

Altitude band	Airspace class	Flight visibility	Distance from cloud
At and above 3 050 m (10 000 ft) AMSL	A*** B C D E F G	8 km	1 500 m horizontally 300 m (1 000 ft) vertically
Below 3050 m (10000 ft) AMSL and above 900 m (3000 ft) AMSL, or above 300 m (1000 ft) above terrain, whichever is the higher	A***B C D E F G	5 km	1 500 m horizontally 300 m (1 000 ft) vertically
At and below 900 m (3000 ft) AMSL, or 300 m (1000 ft) above terrain, whichever is the higher	A***B C D E	5 km	1 500 m horizontally 300 m (1 000 ft) vertically
	F G	5 km**	Clear of cloud and with the surface in sight

Table 1*

* *When the height of the transition altitude is lower than 10,000 ft (3050m) AMSL, FL 100 should be used in lieu of 10,000ft.*

** *When so prescribed by the appropriate ATS authority:*

(a) lower flight visibilities to 1500 m may be permitted for flights 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 levels.

(b) Helicopters may be permitted to operate in less than 1500 m flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

*** *The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.*

(b) Except when a 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:

(1) when the ceiling is less than 1500 ft (450 m); or

(2) when the ground visibility is less than 5 km.

(c) VFR flights between sunset and sunrise, or such other period between sunset and sunrise as may be prescribed by the appropriate ATS authority, shall be operated in accordance with the conditions prescribed by such authority.

(d) Unless authorised by the appropriate ATS authority, VFR flights shall not be operated:

(1) at or above FL 200;

(2) at transonic and supersonic speeds.

Note: Authorisation for VFR flights to operate above FL 290 shall not be granted in areas where a vertical separation minimum of 300 m (1 000 ft) is applied above FL 290.

(e) Except when necessary for take-off or landing, or except by permission from the appropriate authority, a VFR flight shall not be flown:

(1) over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 1000 ft (300 m) above the highest obstacle within a radius of 600 m from the aircraft;

(2) elsewhere than as specified in (1) above at a height less than 500 ft (150 m) above the ground or water.

(f) 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 3000 ft (900 m) from the ground or water, or a higher datum as specified by the appropriate ATS authority, shall be conducted at a cruising level appropriate to the track as specified in the tables of cruising levels at CAR OPS 0, Appendix 2.

(g) VFR flights shall comply with the provisions of CAR OPS 0.200 to 0.240;

(1) when operated within Classes B, C and D airspace;

(2) when forming part of aerodrome traffic at controlled aerodromes; or

(3) when operated as special VFR flights.

(h) A VFR flight operating within or into areas, or along routes, designated by the appropriate ATS authority in accordance with CAR OPS 0.185(a)(3) & (4), shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and report its position as necessary to, the air traffic services unit providing flight information service.

(i) 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, communicate the necessary changes to be effected to its current flight plan, or

(2) when so required by CAR OPS 0.185, submit a flight plan to the appropriate air traffic services unit and obtain a clearance prior to proceeding IFR when in controlled airspace.

OPS 0.310 Special VFR Weather Minimums

When conditions for flight under VFR cannot be met, a pilot may be cleared by ATC to operate under Special VFR in a control zone.

CHAPTER 4

INSTRUMENT FLIGHT RULES

OPS 0.400 Aircraft Equipment

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

OPS 0.405 Minimum Levels

Except when necessary for take-off or landing, or except when specifically authorised by the appropriate authority, an IFR flight shall be flown at a level which is not below the minimum flight altitude established by the State whose territory is overflown, or where no such minimum flight altitude has been established:

(a) over high terrain or in mountainous areas, at a level which is at least 2,000 ft (600 m) above the highest obstacle located within 8 km of the estimated position of the aircraft;

(b) elsewhere than as specified in (a), at a level which is at least 1,000 ft (300 m) above the highest obstacle located within 8 km of the estimated position of the aircraft.

Note: The estimated position of the aircraft will take account of the navigational accuracy which can be achieved on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.

OPS 0.410 Change from IFR Flight to VFR Flight

(a) 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 specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

(b) When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions it shall not cancel its IFR flight unless it is anticipated, and intended that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

OPS 0.415 IFR Flights Within Controlled Airspace

(a) IFR flights shall comply with the provisions of CAR OPS 0.200 to 0.240 when operated in controlled airspace.

(b) 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:

(1) the tables of cruising levels in CAR OPS 0, Appendix 2, or

(2) a modified table of cruising levels, when so prescribed;

except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority in the Aeronautical Information Publication.

OPS 0.420 IFR Flights Outside Controlled Airspace

(a) 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;

(1) the tables of cruising levels in CAR OPS 0, Appendix 2 , except when otherwise specified by the appropriate ATS authority for flight at or below 3,000 ft (900 m) above mean sea level; or

(2) a modified table of cruising levels, when so prescribed.

Note: This provision does not preclude the use of cruise climb techniques by aircraft in supersonic flight.

(b) Communication

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority in accordance with CAR OPS 0.185(a)(3) & (4) shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

(c) Position Reports

An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to:

(1) submit a flight plan,

(2) maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with air traffic services unit providing flight information service,

shall report position as specified in CAR OPS 0.225 for controlled flights.

APPENDIX 1

SIGNALS

1. DISTRESS AND URGENCY SIGNALS

Note: None of the provisions in this section 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.

1.1 Distress signals

The following signals, used either together or separately, mean 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 radiotelephony distress signal 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.

1.2 Urgency signals

(a) The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

(1) the repeated switching on and off of the landing lights; or

(2) the repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation lights.

(b) The following signals, used either together or separately, mean 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:

(1) a signal made by radiotelegraphy or by any other signalling method consisting of the group XXX;

(2) a radiotelephony urgency signal consisting of the spoken words PAN, PAN;

(3) an urgency message sent via data link which transmits the intent of the words PAN, PAN.

1.3 Action by the Aircraft in Distress

In addition to being preceded by the radiotelephony distress signal MAYDAY, preferably spoken three times, the distress message to be sent by an aircraft in distress shall:

(a) be on the air-ground frequency in use at the time;

(b) consist of as many as possible of the following elements spoken distinctly and, if possible, in the following order:

(1) name of the station addressed (time and circumstances permitting);

(2) the identification of the aircraft;

(3) the nature of the distress condition;

(4) intention of the person in command;

(5) present position, level (i.e. flight level, altitude, etc., as appropriate) and heading.

Note 1: The foregoing provisions may be supplemented by the following measures:

(a) the distress message of an aircraft in distress being made on the emergency frequency 121.5 MHz or another aeronautical mobile frequency, if considered necessary or desirable. Not all aeronautical stations maintain a continuous guard on the emergency frequency;

(b) the distress message of an aircraft in distress being broadcast, if time and circumstances make this course preferable;

(c) the aircraft transmitting on the maritime mobile service radiotelephony calling frequencies;

(d) the aircraft using any means at its disposal to attract attention and make known its conditions (including the activation of the appropriate SSR mode and code);

(e) any station taking any means at its disposal to assist an aircraft in distress;

(f) any variation on the elements listed, when the transmitting station is not itself in distress, provided that such circumstance is clearly stated in the distress message.

Note 2: The station addressed will normally be that station communicating with the aircraft or in whose area of responsibility the aircraft is operating.

Note 3: The above procedures are also applicable to an urgency message (PAN).

(c) When an aircraft is no longer in distress, it shall transmit a message cancelling the distress condition.

2. SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

2.1 Signals initiated by intercepting aircraft and responses by intercepted aircraft

Series	*INTERCEPTING Aircraft Signals*	*Meaning*	*INTERCEPTED Aircraft Responds*	*Meaning*
1	DAY or NIGHT — Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left (or to the right in the case of a helicopter) on the desired heading. *Note 1.— Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn given above in Series 1.* *Note 2.— If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of race-track patterns and to rock the aircraft each time it passes the intercepted aircraft.*	You have been intercepted. Follow me.	DAY or NIGHT — Rocking aircraft, flashing navigational lights at irregular intervals and following.	Understood, will comply.
2	DAY or NIGHT — An abrupt breakaway manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT — Rocking the aircraft.	Understood, will comply.
3	DAY or NIGHT — Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT — Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply.

2.2 Signals initiated by intercepted aircraft and responses by intercepting aircraft

Series	*INTERCEPTED Aircraft Signals*	*Meaning*	*INTERCEPTING Aircraft Responds*	*Meaning*
4	DAY or NIGHT — Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 m (1 000 ft) but not exceeding 600 m (2 000 ft) (in the case of a helicopter, at a height exceeding 50 m (170 ft) but not exceeding 100 m (330 ft)) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT — If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood, follow me. Understood, you may proceed.
5	DAY or NIGHT — Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.
6	DAY or NIGHT — Irregular flashing of all available lights.	In distress.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.

3. VISUAL SIGNALS USED TO WARN AN UNAUTHORISED AIRCRAFT FLYING IN, OR ABOUT TO ENTER A RESTRICTED, PROHIBITED OR DANGER AREA

By day and by night, a series of projectiles discharged from the ground 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.

4. SIGNALS FOR AERODROME TRAFFIC

4.1 Light and pyrotechnic signals

(a) Instructions

Light		*From Aerodrome Control to:*	
		Aircraft in flight	*Aircraft on the ground*
Directed towards aircraft concerned (see Figure A1-	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 apron*	Return to starting point on the aerodrome
Red pyrotechnic		Notwithstanding any previous instructions, do not land for the time being	

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

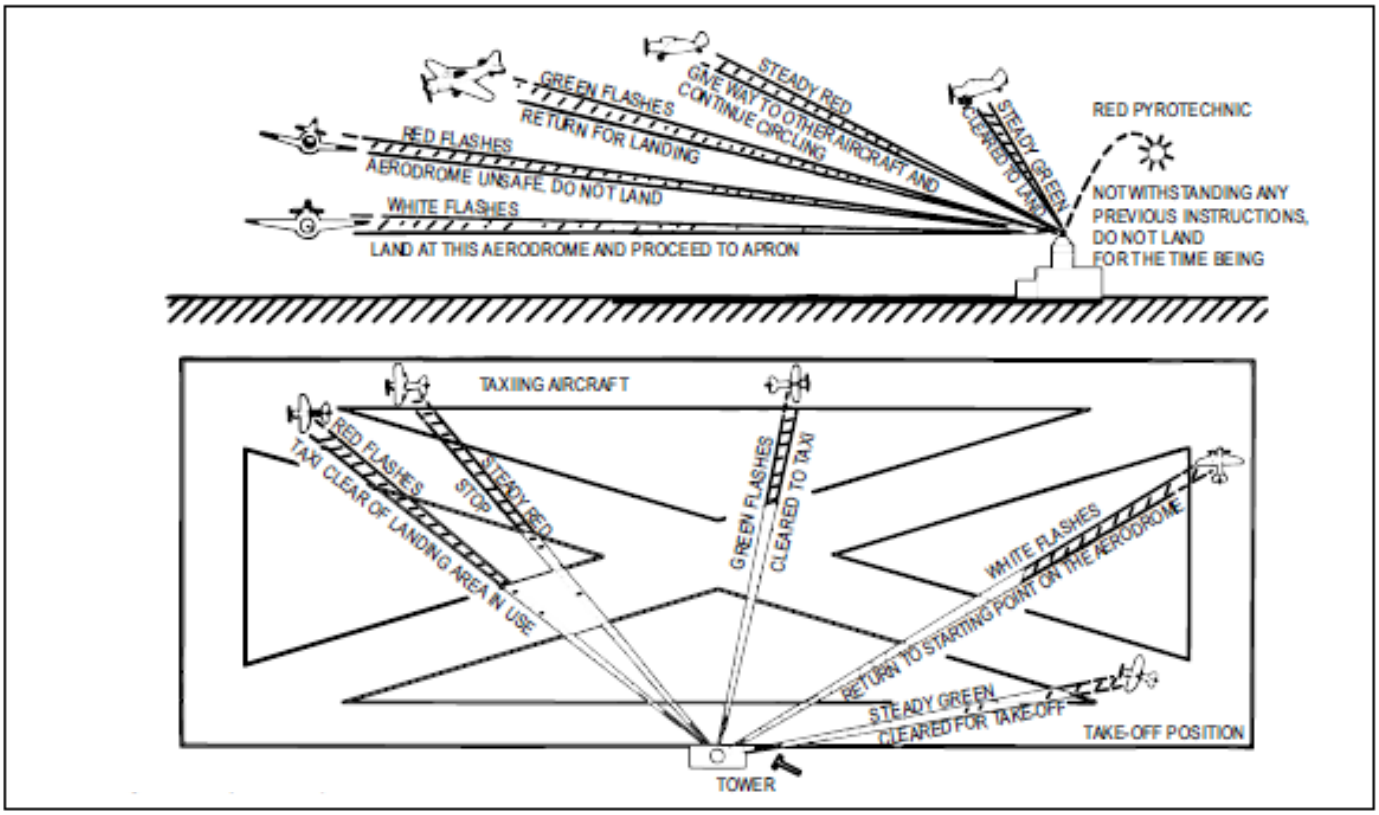


Figure A1-1

(b) Acknowledgement by an aircraft

(1) When in flight:

(i) during the hours of daylight:

— by rocking the aircraft's wings;

Note: This signal should not be expected on the base and final legs of the approach.

(ii) during the hours of darkness:

— by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.

(2) When on the ground:

(i) during the hours of daylight:

— by moving the aircraft's ailerons or rudder;

(ii) during the hours of darkness:

— by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.

4.2 Visual ground signals

4.2.1 Prohibition of landing

A horizontal red square panel with yellow diagonals (Figure A1-2) when displayed in a signal area indicates that landings are prohibited and that the prohibition is liable to be prolonged.

Figure A1-2

4.2.2 Need for special precautions while approaching or landing

A horizontal red square panel with one yellow diagonal (Figure A1-3) when displayed in a signal area indicates that owing to the bad state of the manoeuvring area, or for any other reason, special precautions must be observed in approaching to land or in landing.

Figure A1-3

4.2.3 Use of runways and taxiways

A horizontal white dumb-bell (Figure A1-4) when displayed in a signal area indicates that aircraft are required to land, take off and taxi on runways and taxiways only.

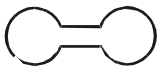


Figure A1-4

The same horizontal white dumb-bell but with a black bar placed perpendicular to the shaft across each circular portion of the dumb-bell (Figure A1-5) when displayed in a signal area indicates that aircraft are required to land and take off on runways only, but other manoeuvres need not be confined to runways and taxiways.

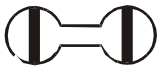


Figure A1-5

4.2.4 Closed runways or taxiways

Crosses of a single contrasting colour, yellow or white (Figure A1-6), displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.

Figure A1-6

4.2.5 Directions for landing or take-off

A horizontal white or orange landing T (Figure A1-7) indicates the direction to be used by aircraft for landing and take-off, which shall be in a direction parallel to the shaft of the T towards the cross arm.

Note: When used at night, the landing T is either illuminated or outlined in white lights.

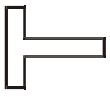


Figure A1-7

A set of two digits (Figure A1-8) displayed vertically at or near the aerodrome control tower indicates to aircraft on the manoeuvring area the direction for take-off, expressed in units of 10 degrees to the nearest 10 degrees of the magnetic compass.

Figure A1-8

4.2.6 Right-hand traffic

When displayed in a signal area, or horizontally at the end of the runway or strip in use, a right-hand arrow of conspicuous colour (Figure A1-9) indicates that turns are to be made to the right before landing and after take-off.

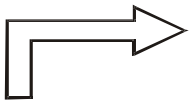


Figure A1-9

4.2.7 Air traffic services reporting office

The letter C displayed vertically in black against a yellow background (Figure A1-10) indicates the location of the air traffic services reporting office.

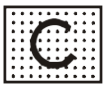


Figure A1-10

4.2.8 Glider flights in operation

A double white cross displayed horizontally (Figure A1-11) in the signal area indicates that the aerodrome is being used by gliders and that glider flights are being performed.

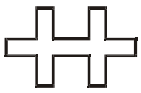


Figure A1-11

5. MARSHALLING SIGNALS

5.1 From a signalman to an aircraft

Note 1: These signals are designed for use by the signal- man, with hands illuminated as necessary to facilitate observation by the pilot, and facing the aircraft in a position:

(a) for fixed-wing aircraft, on left side of aircraft, where best seen by the pilot; and

(b) for helicopters, where the signalman can best be seen by the pilot.

Note 2: The meaning of the relevant signals remains the same if bats, illuminated wands or torchlights are held.

Note 3: The aircraft engines are numbered, for the signalman facing the aircraft, from right to left (i.e. No. 1 engine being the port outer engine).

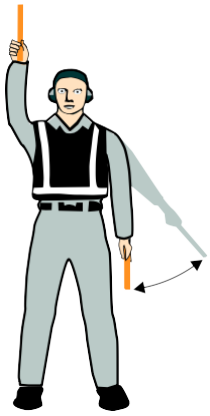
Note 4: Signals marked with an asterisk (*) are designed for use to hovering helicopters.

Note 5: References to wands may also be read to refer to daylight-fluorescent table-tennis bats or gloves (daytime only).

Note 6: References to the signalman may also be read to refer to marshaller.

Prior to using the following signals, the signalman shall ascertain that the area within which an aircraft is to be guided is clear of objects which the aircraft might otherwise strike.

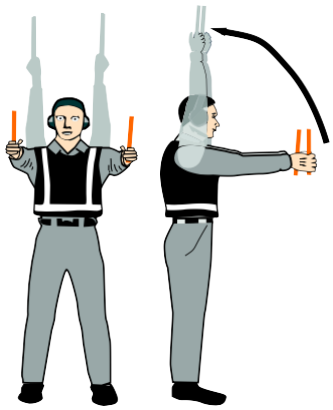
Note: The design of many aircraft is such that the path of the wing tips, engines and other extremities cannot always be monitored visually from the flight deck while the aircraft is being manoeuvred on the ground.



1. Wingwalker/guide

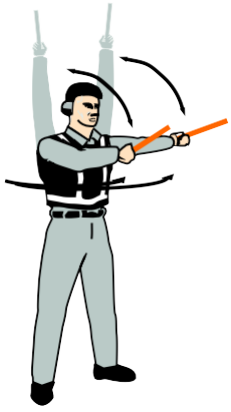
Raise right hand above head level with wand pointing up; move left-hand wand pointing down toward body.

Note.— This signal provides an indication by a person positioned at the aircraft wing tip, to the pilot/ marshaller/ push-back operator, that the aircraft movement on/off a parking position would be unobstructed.



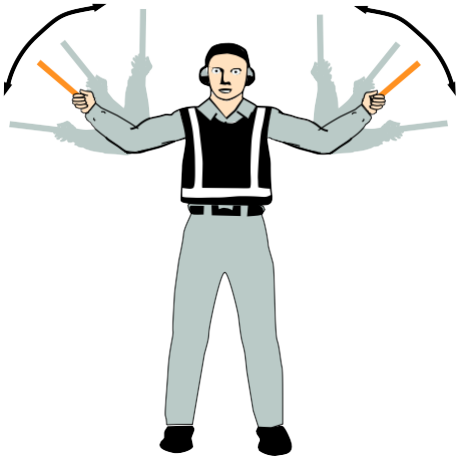
2. Identify gate

Raise fully extended arms straight above head with wands pointing up.



3. Proceed to next signalman or as directed by tower/ground control

Point both arms upward; move and extend arms outward to sides of body and point with wands to direction of next signalman or taxi area.



4. Straight ahead

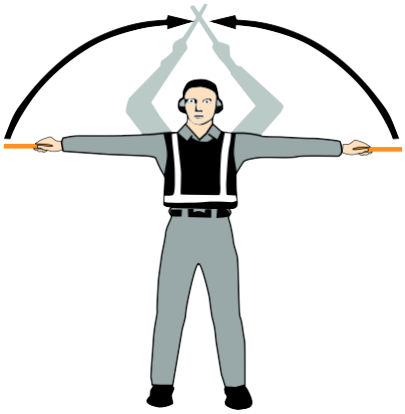
Bend extended arms at elbows and move wands up and down from chest height to head.

5 a). Turn left (from pilot's point of view)

With right arm and wand extended at a 90-degree angle to body, make "come ahead" signal with left hand. The rate of signal motion indicates to pilot the rate of aircraft turn.

5 b). Turn right (from pilot's point of view)

With left arm and wand extended at a 90-degree angle to body, make "come ahead" signal with right hand. The rate of signal motion indicates to pilot the rate of aircraft turn.

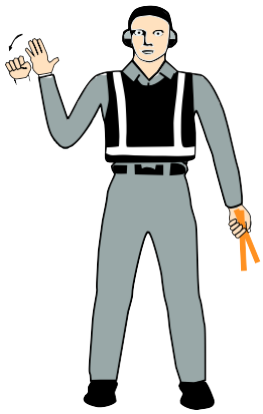


6 a). Normal stop

Fully extend arms and wands at a 90-degree angle to sides and slowly move to above head until wands cross.

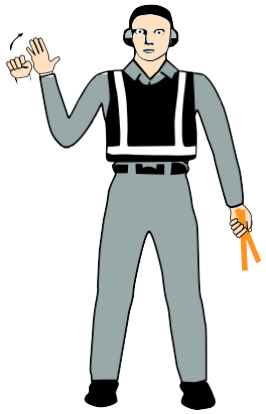
6 b). Emergency stop

Abruptly extend arms and wands to top of head, crossing wands.



7 a). Set brakes

Raise hand just above shoulder height with open palm. Ensuring eye contact with flight crew, close hand into a fist. **Do not** move until receipt of "thumbs up" acknowledgement from flight crew.

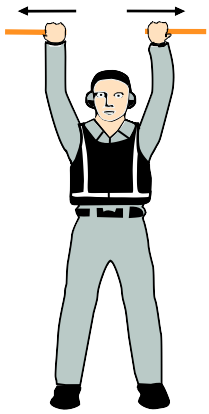


7 b). Release brakes

Raise hand just above shoulder height with hand closed in a fist. Ensuring eye contact with flight crew, open palm. **Do not** move until receipt of "thumbs up" acknowledgement from flight crew.

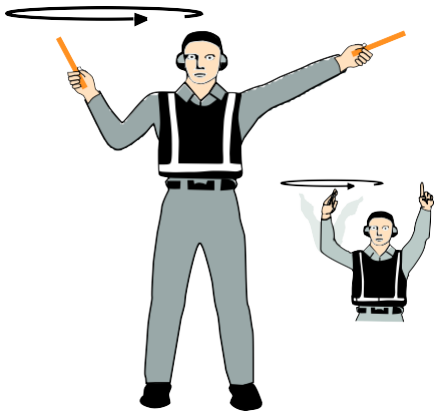
8 a). Chocks inserted

With arms and wands fully extended above head, move wands inward in a "jabbing" motion until wands touch. **Ensure** acknowledgement is received from flight crew.



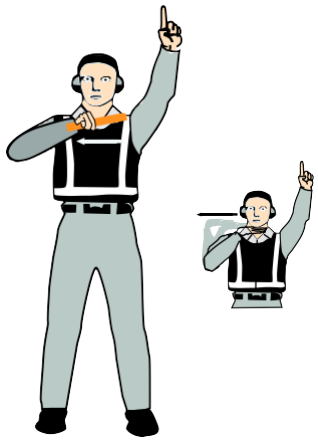
8 b). Chocks removed

With arms and wands fully extended above head, move wands outward in a "jabbing" motion. **Do not** remove chocks until authorised by flight crew.



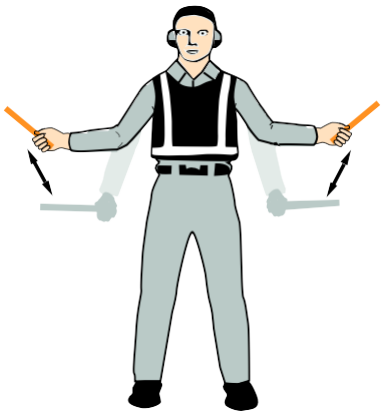
9. Start engine(s)

Raise right arm to head level with wand pointing up and start a circular motion with hand; at the same time, with left arm raised above head level, point to engine to be started.



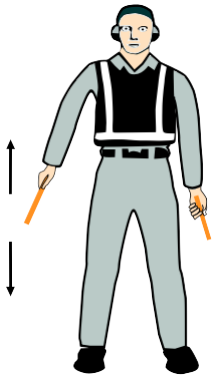
10. Cut engines

Extend arm with wand forward of body at shoulder level; move hand and wand to top of left shoulder and draw wand to top of right shoulder in a slicing motion across throat.



11. Slow down

Move extended arms downwards in a “patting” gesture, moving wands up and down from waist to knees.



12. Slow down engine(s) on indicated side

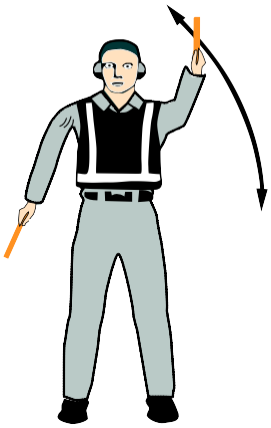
With arms down and wands toward ground, wave either *right* or *left* wand up and down indicating engine(s) on *left* or *right* side respectively should be slowed down.

13. Move back

With arms in front of body at waist height, rotate arms in a forward motion. To stop rearward movement, use signal 6 a) or 6 b).

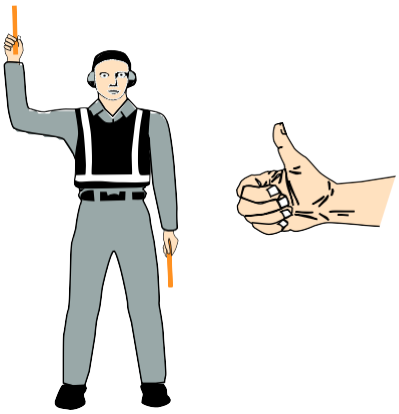
14 a). Turns while backing (for tail to starboard)

Point left arm with wand down and bring right arm from overhead vertical position to horizontal forward position, repeating right-arm movement.



14 b). Turns while backing (for tail to port)

Point right arm with wand down and bring left arm from overhead vertical position to horizontal forward position, repeating left-arm movement.



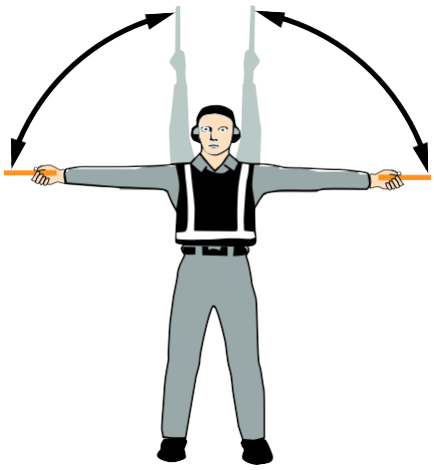
15. Affirmative/all clear

Raise right arm to head level with wand pointing up or display hand with “thumbs up”; left arm remains at side by knee.

Note.— This signal is also used as a technical/ servicing communication signal.

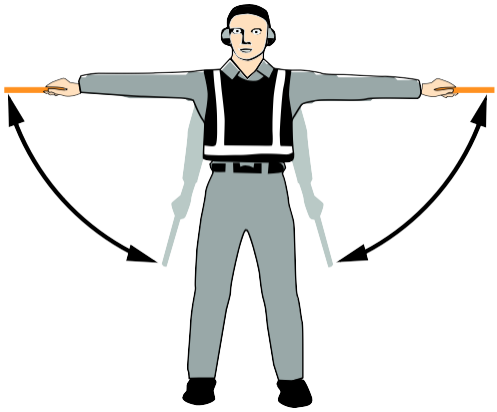
***16. Hover**

Fully extend arms and wands at a 90-degree angle to sides.



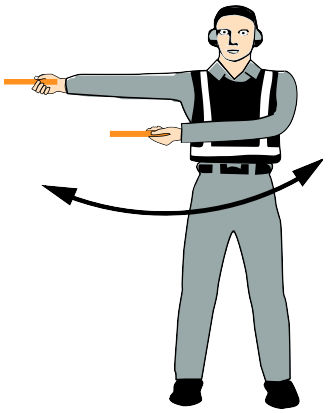
***17. Move upwards**

Fully extend arms and wands at a 90-degree angle to sides and, with palms turned up, move hands upwards. Speed of movement indicates rate of ascent.



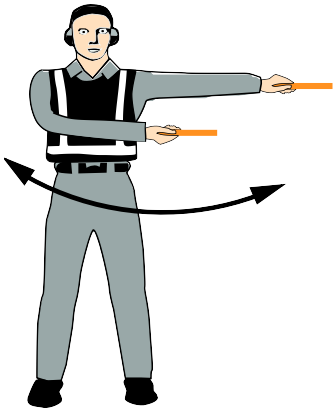
***18. Move downwards**

Fully extend arms and wands at a 90-degree angle to sides and, with palms turned down, move hands downwards. Speed of movement indicates rate of descent.



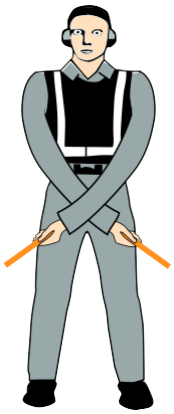
***19 a). Move horizontally left (from pilot's point of view)**

Extend arm horizontally at a 90-degree angle to right side of body. Move other arm in same direction in a sweeping motion.



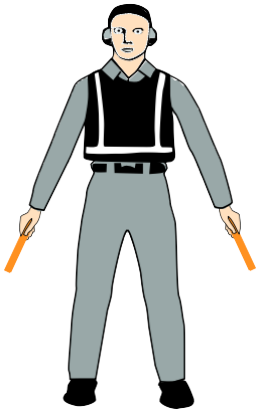
***19 b). Move horizontally right (from pilot's point of view)**

Extend arm horizontally at a 90-degree angle to left side of body. Move other arm in same direction in a sweeping motion.



***20. Land**

Cross arms with wands downwards and in front of body.

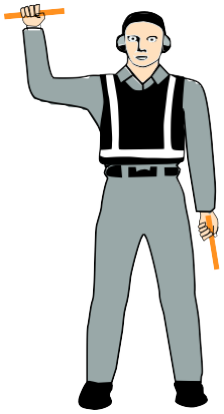


21. Hold position/stand by

Fully extend arms and wands downwards at a 45-degree angle to sides. Hold position until aircraft is clear for next manoeuvre.

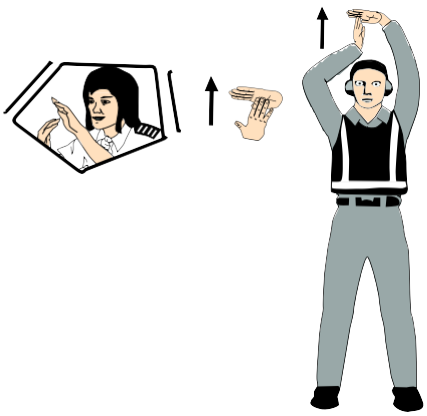
22. Dispatch aircraft

Perform a standard salute with right hand and/or wand to dispatch the aircraft. Maintain eye contact with flight crew until aircraft has begun to taxi.



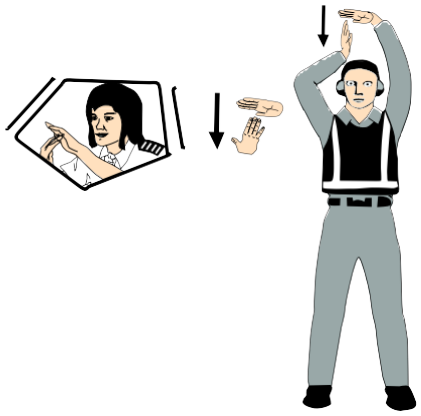
23. Do not touch controls (technical/servicing communication signal)

Extend right arm fully above head and close fist or hold wand in horizontal position; left arm remains at side by knee.



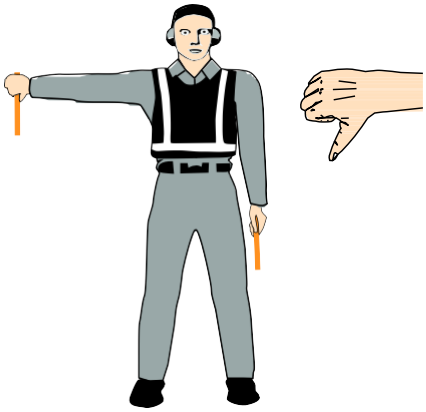
24. Connect ground power (technical/servicing communication signal)

Hold arms fully extended above head; open left hand horizontally and move finger tips of right hand into and touch open palm of left hand (forming a “T”). At night, illuminated wands can also be used to form the “T” above head.



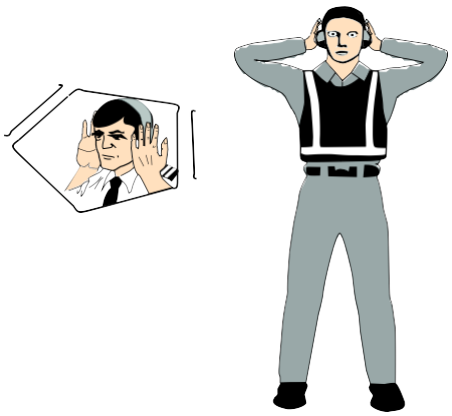
25. Disconnect power (technical/servicing communication signal)

Hold arms fully extended above head with finger tips of right hand touching open horizontal palm of left hand (forming a “T”); then move right hand away from the left. **Do not** disconnect power until authorised by flight crew. At night, illuminated wands can also be used to form the “T” above head.



26. Negative (technical/servicing communication signal)

Hold right arm straight out at 90 degrees from shoulder and point wand down to ground or display hand with “thumbs down”; left hand remains at side by knee.



27. Establish communication via interphone (technical/servicing communication signal)

Extend both arms at 90 degrees from body and move hands to cup both ears.

28. Open/close stairs (technical/servicing communication signal)

With right arm at side and left arm raised above head at a 45-degree angle, move right arm in a sweeping motion towards top of left shoulder.

Note.— This signal is intended mainly for aircraft with the set of integral stairs at the front.

5.2 From the pilot of an aircraft to a signalman

Note 1: These signals are designed for use by a pilot in the cockpit with hands plainly visible to the signalman, and illuminated as necessary to facilitate observation by the signalman.

Note 2: The aircraft engines are numbered in relation to the signalman facing the aircraft, from right to left (i.e. No. 1 engine being the port outer engine).

5.2.1 Brakes

Note: The moment the fist is clenched or the fingers are extended indicates, respectively, the moment of brake engagement or release.

(a) Brakes engaged: raise arm and hand, with fingers extended, horizontally in front of face, then clench fist.

(b) Brakes released: raise arm, with fist clenched, horizon- tally in front of face, then extend fingers.

5.2.2 Chocks

(a) *Insert chocks:* arms extended, palms outwards, move hands inwards to cross in front of face.

(b) *Remove chocks:* hands crossed in front of face, palms outwards, move arms outwards.

5.2.3 Ready to start engine(s)

Raise the appropriate number of fingers on one hand indicating the number of the engine to be started.

5.3 Technical/servicing communication signals

(a) Manual signals shall only be used when verbal communication is not possible with respect to technical/servicing communication signals.

(b) Signalmen shall ensure that an acknowledgement is received from the flight crew with respect to technical/servicing communication signals.

6. STANDARD EMERGENCY HAND SIGNALS

The following hand signals are established as the minimum required for emergency communication between the aircraft rescue and firefighting (ARFF) incident commander/ARFF fire fighters and the cockpit and/or cabin crews of the incident aircraft. ARFF emergency hand signals should be given from the left front side of the aircraft for the flight crew.

Note: In order to communicate more effectively with the cabin crew, emergency hand signals may be given by ARFF fire fighters from other positions.

6.1 Recommend evacuation

Evacuation recommended based on ARFF and incident commander's assessment of external situation.

Arm extended from body and held horizontal with hand upraised at eye level. Execute beckoning arm motion angled backward. Non-beckoning arm held against body.

Night — same with wands.

6.2 Recommended stop

Recommend evacuation in progress be halted. Stop aircraft movement or other activity in progress.

Arms in front of head, crossed at wrists.

Night — same with wands.

6.3 Emergency contained

No outside evidence of dangerous conditions or "all-clear."

Arms extended outward and down at a 45-degree angle. Arms moved inward below waistline simultaneously until wrists crossed, then extended outward to starting position (umpire's "safe" signal).

Night — same with wands.

4. Fire

Move right-hand in a "fanning" motion from shoulder to knee, while at the same time pointing with left hand to area of fire.

Night — same with wands.

APPENDIX 2

TABLES OF CRUISING LEVELS

The cruising levels to be observed when so required by CAR OPS 0 are as follows:

RVSM — FEET

(a) in areas where feet are used for altitude and where, in accordance with regional air navigation agreements, a vertical separation minimum of 1 000 ft is applied between FL 290 and FL 410 inclusive:*

TRACK**											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1 000	300	–	–	–	020	2 000	600	–	–	–
030	3 000	900	035	3 500	1 050	040	4 000	1 200	045	4 500	1 350
050	5 000	1 500	055	5 500	1 700	060	6 000	1 850	065	6 500	2 000
070	7 000	2 150	075	7 500	2 300	080	8 000	2 450	085	8 500	2 600
090	9 000	2 750	095	9 500	2 900	100	10 000	3 050	105	10 500	3 200
110	11 000	3 350	115	11 500	3 500	120	12 000	3 650	125	12 500	3 800
130	13 000	3 950	135	13 500	4 100	140	14 000	4 250	145	14 500	4 400
150	15 000	4 550	155	15 500	4 700	160	16 000	4 900	165	16 500	5 050
170	17 000	5 200	175	17 500	5 350	180	18 000	5 500	185	18 500	5 650
190	19 000	5 800	195	19 500	5 950	200	20 000	6 100	205	20 500	6 250
210	21 000	6 400	215	21 500	6 550	220	22 000	6 700	225	22 500	6 850
230	23 000	7 000	235	23 500	7 150	240	24 000	7 300	245	24 500	7 450
250	25 000	7 600	255	25 500	7 750	260	26 000	7 900	265	26 500	8 100
270	27 000	8 250	275	27 500	8 400	280	28 000	8 550	285	28 500	8 700
290	29 000	8 850				300	30 000	9 150			
310	31 000	9 450				320	32 000	9 750			
330	33 000	10 050				340	34 000	10 350			
350	35 000	10 650				360	36 000	10 950			
370	37 000	11 300				380	38 000	11 600			
390	39 000	11 900				400	40 000	12 200			
410	41 000	12 500				430	43 000	13 100			
450	45 000	13 700				470	47 000	14 350			
490	49 000	14 950				510	51 000	15 550			
etc.	etc.	etc.				etc.	etc.	etc.			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 1 000 ft (300 m) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

RVSM — METRES

(b) in areas where metres are used for altitude and where, in accordance with regional air navigation agreements, a vertical separation minimum of 300 m is applied between 8 900 m and 12 500 m inclusive:*

TRACK**											
From 000 degrees to 179 degrees***						From 180 degrees to 359 degrees***					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
Standard Metric	Metres	Feet	Standard Metric	Metres	Feet	Standard Metric	Metres	Feet	Standard Metric	Metres	Feet
0030	300	1 000	–	–	–	0060	600	2 000	–	–	–
0090	900	3 000	0105	1 050	3 500	0120	1 200	3 900	0135	1 350	4 400
0150	1 500	4 900	0165	1 650	5 400	0180	1 800	5 900	0195	1 950	6 400
0210	2 100	6 900	0225	2 250	7 400	0240	2 400	7 900	0255	2 550	8 400
0270	2 700	8 900	0285	2 850	9 400	0300	3 000	9 800	0315	3 150	10 300
0330	3 300	10 800	0345	3 450	11 300	0360	3 600	11 800	0375	3 750	12 300
0390	3 900	12 800	0405	4 050	13 300	0420	4 200	13 800	0435	4 350	14 300
0450	4 500	14 800	0465	4 650	15 300	0480	4 800	15 700	0495	4 950	16 200
0510	5 100	16 700	0525	5 250	17 200	0540	5 400	17 700	0555	5 550	18 200
0570	5 700	18 700	0585	5 850	19 200	0600	6 000	19 700	0615	6 150	20 200
0630	6 300	20 700	0645	6 450	21 200	0660	6 600	21 700	0675	6 750	22 100
0690	6 900	22 600	0705	7 050	23 100	0720	7 200	23 600	0735	7 350	24 100
0750	7 500	24 600	0765	7 650	25 100	0780	7 800	25 600	0795	7 950	26 100
0810	8 100	26 600	0825	8 250	27 100	0840	8 400	27 600	0855	8 550	28 100
0890	8 900	29 100				0920	9 200	30 100			
0950	9 500	31 100				0980	9 800	32 100			
1010	10 100	33 100				1040	10 400	34 100			
1070	10 700	35 100				1100	11 000	36 100			
1130	11 300	37 100				1160	11 600	38 100			
1190	11 900	39 100				1220	12 200	40 100			
1250	12 500	41 100				1310	13 100	43 000			
1370	13 700	44 900				1430	14 300	46 900			
1490	14 900	48 900				1550	15 500	50 900			
etc.	etc.	etc.				etc.	etc.	etc.			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 1 000 ft (300 m) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

*** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

Non-RVSM — FEET

(c) in other areas where feet are the primary unit of measurement for altitude:

TRACK*											
From 000 degrees to 179 degrees**						From 180 degrees to 359 degrees**					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1 000	300	–	–	–	020	2 000	600	–	–	–
030	3 000	900	035	3 500	1 050	040	4 000	1 200	045	4 500	1 350
050	5 000	1 500	055	5 500	1 700	060	6 000	1 850	065	6 500	2 000
070	7 000	2 150	075	7 500	2 300	080	8 000	2 450	085	8 500	2 600
090	9 000	2 750	095	9 500	2 900	100	10 000	3 050	105	10 500	3 200
110	11 000	3 350	115	11 500	3500	120	12 000	3 650	125	12 500	3 800
130	13 000	3 950	135	13 500	4 100	140	14 000	4 250	145	14 500	4 400
150	15 000	4 550	155	15 500	4 700	160	16 000	4 900	165	16 500	5 050
170	17 000	5 200	175	17 500	5 350	180	18 000	5 500	185	18 500	5 650
190	19 000	5 800	195	19 500	5 950	200	20 000	6 100	205	20 500	6 250
210	21 000	6 400	215	21 500	6 550	220	22 000	6 700	225	22 500	6 850
230	23 000	7 000	235	23 500	7 150	240	24 000	7 300	245	24 500	7 450
250	25 000	7 600	255	25 500	7 750	260	26 000	7 900	265	26 500	8 100
270	27 000	8 250	275	27 500	8 400	280	28 000	8 550	285	28 500	8 700
290	29 000	8 850	300	30 000	9 150	310	31 000	9 450	320	32 000	9 750
330	33 000	10 050	340	34 000	10 350	350	35 000	10 650	360	36 000	10 950
370	37 000	11 300	380	38 000	11 600	390	39 000	11 900	400	40 000	12 200
410	41 000	12 500	420	42 000	12 800	430	43 000	13 100	440	44 000	13 400
450	45 000	13 700	460	46 000	14 000	470	47 000	14 350	480	48 000	14 650
490	49 000	14 950	500	50 000	15 250	510	51 000	15 550	520	52 000	15 850
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.

* Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

.

Non-RVSM — METRES

(d) in other areas where metres are the primary unit of measurement for altitude:

TRACK*											
From 000 degrees to 179 degrees**						From 180 degrees to 359 degrees**					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
Standard Metric	Metres	Feet	Standard Metric	Metres	Feet	Standard Metric	Metres	Feet	Standard Metric	Metres	Feet
0030	300	1 000	–	–	–	0060	600	2 000	–	–	–
0090	900	3 000	0105	1 050	3 500	0120	1 200	3 900	0135	1 350	4 400
0150	1 500	4 900	0165	1 650	5 400	0180	1 800	5 900	0195	1 950	6 400
0210	2 100	6 900	0225	2 250	7 400	0240	2 400	7 900	0255	2 550	8 400
0270	2 700	8 900	0285	2 850	9 400	0300	3 000	9 800	0315	3 150	10 300
0330	3 300	10 800	0345	3 450	11 300	0360	3 600	11 800	0375	3 750	12 300
0390	3 900	12 800	0405	4 050	13 300	0420	4 200	13 800	0435	4 350	14 300
0450	4 500	14 800	0465	4 650	15 300	0480	4 800	15 700	0495	4 950	16 200
0510	5 100	16 700	0525	5 250	17 200	0540	5 400	17 700	0555	5 550	18 200
0570	5 700	18 700	0585	5 850	19 200	0600	6 000	19 700	0615	6 150	20 200
0630	6 300	20 700	0645	6 450	21 200	0660	6 600	21 700	0675	6 750	22 100
0690	6 900	22 600	0705	7 050	23 100	0720	7 200	23 600	0735	7 350	24 100
0750	7 500	24 600	0765	7 650	25 100	0780	7 800	25 600	0795	7 950	26 100
0810	8 100	26 600	0825	8 250	27 100	0840	8 400	27 600	0855	8 550	28 100
0890	8 900	29 100	0920	9 200	30 100	0950	9 500	31 100	0980	9 800	32 100
1010	10 100	33 100	1040	10 400	34 100	1070	10 700	35 100	1100	11 000	36 100
1130	11 300	37 100	1160	11 600	38 100	1190	11 900	39 100	1220	12 200	40 100
1250	12 500	41 100	1280	12 800	42 100	1310	13 100	43 000	1370	13 400	44 000
1370	13 700	44 900	1400	14 000	46 100	1430	14 300	46 900	1460	14 600	47 900
1490	14 900	48 900	1520	15 200	49 900	1550	15 500	50 900	1580	15 800	51 900
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.

* Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

** Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

APPENDIX 3

INTERCEPTION OF CIVIL AIRCRAFT

1. Principles to be observed by States

1.1 To achieve the uniformity in regulations which is necessary for the safety of navigation of civil aircraft due regard shall be had by the Authority to the following principles when developing regulations and administrative directives:

(a) interception of civil aircraft will be undertaken only as a last resort;

(b) if undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, guide it away from a prohibited, restricted or danger area or instruct it to effect a landing at a designated aerodrome;

(c) practice interception of civil aircraft will not be undertaken;

(d) navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established; and

(e) in the case where an intercepted civil aircraft is required to land in the territory overflown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned.

1.2 The Authority shall publish a standard method that has been established for the manoeuvring of aircraft intercepting a civil aircraft. Such method shall be designed to avoid any hazard for the intercepted aircraft.

1.3 The Authority shall ensure that provision is made for the use of secondary surveillance radar or ADS-B, where available, to identify civil aircraft in areas where they may be subject to interception.

2. Action by intercepted aircraft

2.1 An aircraft which is intercepted by another aircraft shall immediately:

(a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1, Section 2;

(b) notify, if possible, the appropriate air traffic services unit;

(c) attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no con- tact has been established and if practicable, repeating this call on the emergency frequency 243 MHz;

(d) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

(e) if equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if

available, unless other- wise instructed by the appropriate air traffic services unit.

2.2 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

2.3 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

3. Radio communication during interception

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in the table below and transmitting each phrase twice:

Phrases for use by INTERCEPTING aircraft			*Phrases for use by INTERCEPTED aircraft*		
Phrase	*Pronunciation*[1]	*Meaning*	*Phrase*	*Pronunciation*[1]	*Meaning*
CALL SIGN	KOL S1-IN	What is your call sign?	CALL SIGN (call sign)[2]	KOL S1-IN (call sign)	My call sign is (call sign)
FOLLOW	FOL-LO	Follow me	WILCO Will comply	VILL-KO	Understood
DESCEND	DEE-SEND	Descend for landing	CAN NOT	KANN NOTT	Unable to comply
YOU LAND	YOU LAAND	Land at this aerodrome	REPEAT	REE-PEET	Repeat your instruction
PROCEED	PRO-SEED	You may proceed	AM LOST	AM LOSST	Position unknown
			MAYDAY	MAYDAY	I am in distress
			HIJACK[3]	HI-JACK	I have been hijacked
			LAND (place name)	LAAND (place name)	I request to land at (place name)
			DESCEND	DEE-SEND	I require descent

1. *In the second column, syllables to be emphasized are underlined.*

2. *The call sign required to be given is that used in radiotelephony communications with air traffic services units and corresponding to the aircraft identification in the flightplan.*

3. *Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".*

APPENDIX 4

LIGHTS TO BE DISPLAYED BY AIRCRAFT

1. Terminology

When the following terms are used in this Appendix, they have the following meanings:

Note: The term "aircraft" applies to remotely piloted aircraft (RPA)

Angles of coverage.

(a) Angle of coverage A is formed by two intersecting vertical planes making angles of 70 degrees to the right and 70 degrees to the left respectively, looking aft along the longitudinal axis to a vertical plane passing through the longitudinal axis.

(b) Angle of coverage F is formed by two intersecting vertical planes making angles of 110 degrees to the right and 110 degrees to the left respectively, looking forward along the longitudinal axis to a vertical plane passing through the longitudinal axis.

(c) Angle of coverage L is formed by two intersecting vertical planes, one parallel to the longitudinal axis of the aircraft, and the other 110 degrees to the left of the first, when looking forward along the longitudinal axis.

(d) Angle of coverage R is formed by two intersecting vertical planes, one parallel to the longitudinal axis of the aircraft, and the other 110 degrees to the right of the first, when looking forward along the longitudinal axis.

Horizontal plane. The plane containing the longitudinal axis and perpendicular to the plane of symmetry of the aircraft.

Longitudinal axis of the aircraft. A selected axis parallel to the direction of flight at a normal cruising speed, and passing through the centre of gravity of the aircraft.

Making way. An aircraft on the surface of the water is "making way" when it is under way and has a velocity relative to the water.

Under command. An aircraft on the surface of the water is "under command" when it is able to execute manoeuvres as required by the International Regulations for Preventing Collisions at Sea for the purpose of avoiding other vessels.

Under way. An aircraft on the surface of the water is "under way" when it is not aground or moored to the ground or to any fixed object on the land or in the water.

Vertical planes. Planes perpendicular to the horizontal plane.

Visible. Visible on a dark night with a clear atmosphere.

2. Navigation Lights to be Displayed in the Air

As illustrated in Figure 1, the following unobstructed navigation lights shall be displayed:

(a) a red light projected above and below the horizontal plane through angle of coverage L;

(b) a green light projected above and below the horizontal plane through angle of coverage R;

(c) a white light projected above and below the horizontal plane rearward through angle of coverage A.

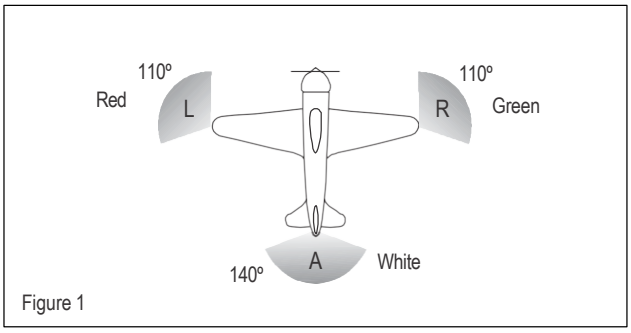


Figure 1

3. Lights to be Displayed on the Water

3.1 General

The International Regulations for Preventing Collisions at Sea require different lights to be displayed in each of the following circumstances:

(a) when under way;

(b) when towing another vessel, or aircraft;

(c) when being towed;

(d) when not under command and not making way;

(e) when making way but not under command;

(f) when at anchor; and

(g) when aground.

Note: The lights required by aircraft in each case are described below.

3.2 When under way

As illustrated in Figure 2, the following appearing as steady unobstructed lights:

(a) a red light projected above and below the horizontal through angle of coverage L;

(b) a green light projected above and below the horizontal through angle of coverage R;

(c) a white light projected above and below the horizontal through angle of coverage A; and

(d) a white light projected through angle of coverage F.

The lights described in 3.2 (a), (b) and (c) should be visible at a distance of at least 3.7 km (2 NM). The light described in 3.2 (d) should be visible at a distance of 9.3 km (5 NM) when fitted to an aircraft of 20 m or more in length or visible at a distance of 5.6 km (3 NM) when fitted to an aircraft of less than 20 m in length.

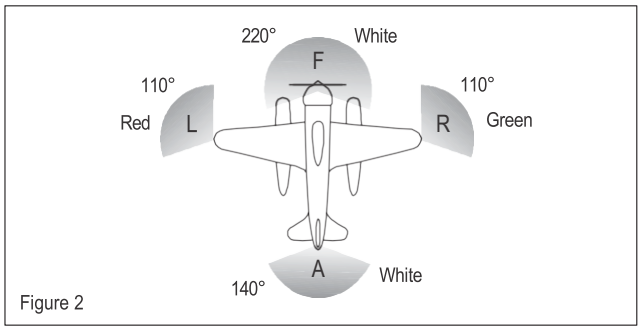


Figure 2

3.3 When towing another vessel or aircraft

As illustrated in Figure 3, the following appearing as steady, unobstructed lights:

(a) the lights described in 3.2;

(b) a second light having the same characteristics as the light described in 3.2 (d) and mounted in a vertical line at least 2 m above or below it; and

(c) a yellow light having otherwise the same characteristics as the light described in 3.2 (c) and mounted in a vertical line at least 2 m above it.

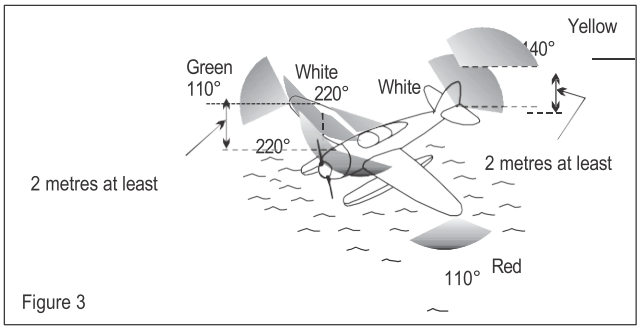


Figure 3

3.4 When being towed

The lights described in 3.2 (a), (b) and (c) appearing as steady, unobstructed lights.

3.5 When not under command and not making way

As illustrated in Figure 4, two steady red lights placed where they can best be seen, one vertically over the other and not less than 1 m apart, and of such a character as to be visible all around the horizon at a distance of at least 3.7 km (2 NM).

3.6 When making way but not under command

As illustrated in Figure 5, the lights described in 3.5 plus the lights described in 3.2 (a), (b) and (c).

Note: The display of lights prescribed in 3.5 and 3.6 is to be taken by the crews of other aircraft as signals that the aircraft showing them is not under command and cannot therefore get out of the way. They are not signals of an aircraft in distress and requiring assistance.

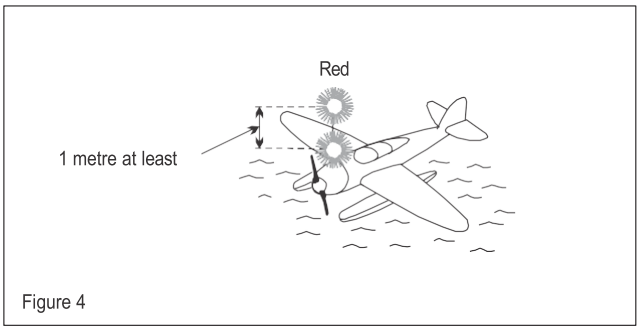


Figure 4

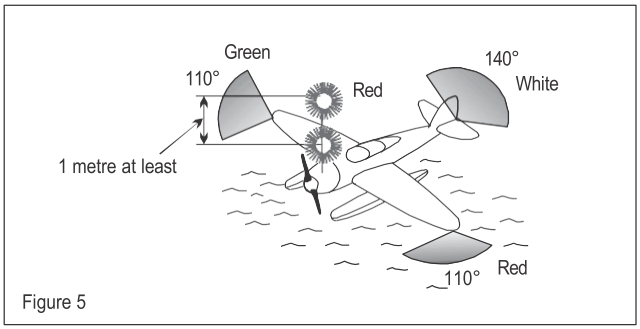


Figure 5

3.7 When at anchor

If less than 50 m in length, where it can best be seen, a steady white light (Figure 6), visible all around the horizon at a distance of at least 3.7 km (2 NM).

If 50 m or more in length, where they can best be seen, a steady white forward light and a steady white rear light (Figure 7) both visible all around the horizon at a distance of at least 5.6 km (3 NM).

If 50 m or more in span a steady white light on each side (Figures 8 and 9) to indicate the maximum span and visible, so far as practicable, all around the horizon at a distance of at least 1.9 km (1 NM).

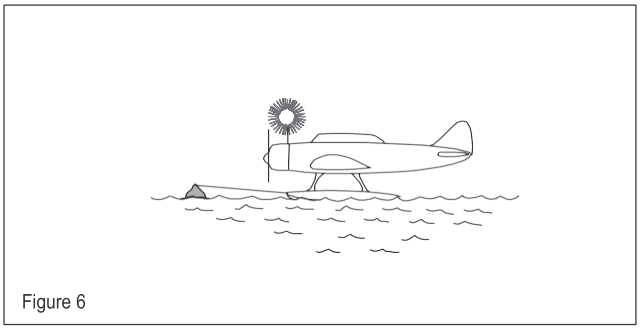


Figure 6

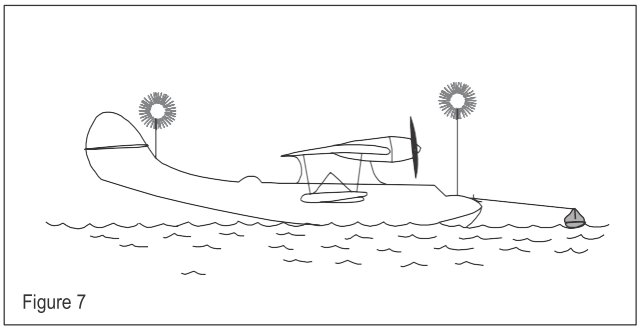
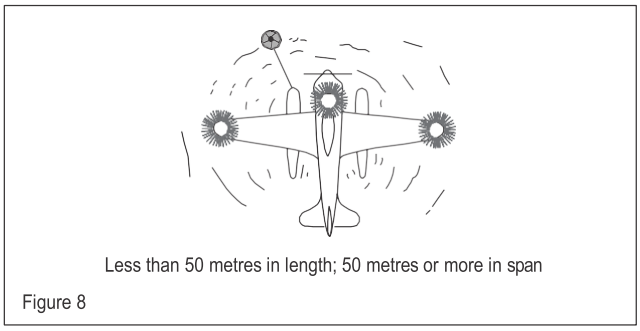
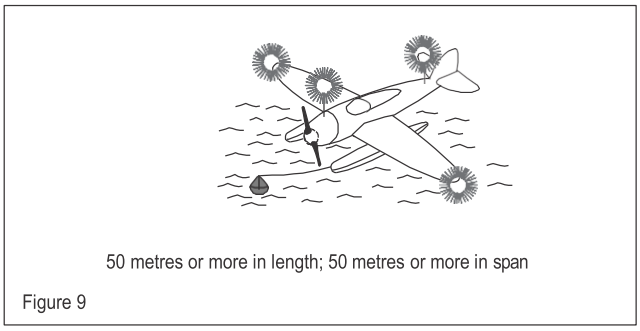


Figure 7


Less than 50 metres in length; 50 metres or more in span
Figure 8


50 metres or more in length; 50 metres or more in span
Figure 9

3.8 When aground

The lights prescribed in 3.7 and in addition two steady red lights in vertical line, at least 1 m apart so placed as to be visible all around the horizon.