

# **YCAR PART VIII**

## **Subpart 1**

### **AIR NAVIGATION SERVICE ORGANISATIONS: GENERAL**

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## **FOREWORD**

- 1 The Civil Aviation and Met. Authority (hereinafter–Authority).
- 2 This requirement shall come in force from June 2013
3. Future amendments of Subpart 1 shall be harmonized with amendments to ICAO Annexes in a timely manner.
- 4 Definitions and abbreviations of terms used in Subpart 1 shall always be interpreted as per the applicable international standards.

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## AIR NAVIGATION ORGANISATIONS SUBPART A — GENERAL PROVISIONS

### YCAR 1.1 APPLICABILITY

- a) YCAR Part VIII, in the Subparts shown below, contains the Rules governing—
  1. The general requirements for;
    - i. ongoing surveillance
    - ii. quality assurance;
    - iii. safety management systems,
  2. The-operation of organisations providing;
    - i. an Aeronautical Information Service (AIS) for the Yemen on behalf of the CAMA, and
    - ii. The requirements for;
      - A. the Yemen Aeronautical Information Publication (AIP),
      - B. the Aeronautical Information Circulars (AIC) and NOTAM.
  3. The classification and designation of Navigable Airspace and Objects affecting Navigable Airspace
  4. The operation of organizations providing Air Traffic Services,
  5. The operation of organizations providing Communication, Navigation and Surveillance Services,
  6. The operation of organizations providing Instrument Flight Procedure Design Services,
  7. The operation of organizations providing Meteorological Services
  8. The operation of organizations providing Search and Rescue Services.



## YCAR 1.2 DEFINITIONS AND ACRONYMS

### (a) Definitions

The use of the word –shall, in these Regulations, means the requirement is mandatory. The use of the word –should does not mean that compliance is optional but rather that, where insurmountable difficulties exist, the Authority may accept an alternative means of compliance, provided that an acceptable safety assurance document from the ATS provider shows that the safety requirements will not be reduced below that intended by the requirement

**Accepted/Acceptable.** Means not objected to by the Authority as suitable for the purpose intended.

**Accepting unit/controller.** ATC unit/controller next to take control of an aircraft

**Accident.** An occurrence associated with an operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or, in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

1. A person is fatally or seriously injured as a result of :
  - i. being in the aircraft, or
  - ii. direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
  - iii. direct exposure to jet blast,

Except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or

2. The aircraft sustains damage or structural failure which:
  - i. adversely affects the structural strength, performance or flight characteristics of the aircraft, and
  - ii. would normally require major repair or replacement of the affected component,

Except for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes); or for minor damages to the main rotor blades, tail rotor blades, landing gear and those resulting from hail or bird strike (including holes in the radome); or

3. The aircraft is missing or completely inaccessible. An aircraft is considered missing when the official search has been terminated and the wreckage has not been located.

**Accuracy.** A degree of conformance between the estimated or measured value and the true value.

**Accountable Manager.** The person within an organisation who has:

1. Full control of the human resources required for the operations authorized to be conducted under the operations certificate;
2. Full control of the financial resources required for the operations authorized to be conducted under the operations certificate;
3. Final authority over operations authorized to be conducted under the operations certificate;
4. Direct responsibility for the conduct of the organization's affairs; and
5. Final responsibility for all safety issues.

**ADS-B (Automatic Dependent Surveillance – Broadcast).** A means by which aircraft, vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

**ADS-C (Automatic Dependent Surveillance – Contract).** A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.

*Note: The abbreviated term “ADS Contract” is commonly used to refer to ADS event contract, ADS demand contract, ADFS periodic contract or an emergency mode.*

**ADS-C agreement.** A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the ATS unit and frequency of reports which have to be agreed to prior to using ADS-C in the provision of ATS)

*Note: The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.*

**Advisory route.** A designated route along which air traffic advisory service is available.

**Aerodrome.** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome beacon.** Aeronautical beacon used to indicate the location of an aerodrome from the air.

**Aerodrome control service.** Air traffic control service for aerodrome traffic.

**Aerodrome control tower.** A unit established to provide air traffic control service to aerodrome traffic.

**Aerodrome elevation.** The elevation of the highest point of the landing area.

**Aerodrome facilities and equipment.** Facilities and equipment, inside or outside the boundaries of the aerodrome, that are constructed or installed, operated and maintained for the arrival, departure and surface movement of aircraft.

**Aerodrome flight information service (AFIS).** A flight information service provided to aerodrome traffic at an uncontrolled aerodrome provided with such a service.

**Aerodrome Meteorological Office.** An office, located at an aerodrome, designated to provide meteorological services for international air navigation.

**Aerodrome traffic.** All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.

*Note: An aircraft is in the vicinity of the aerodrome when it is in, entering or leaving the aerodrome circuit.*

**Aerodrome traffic zone.** An airspace of defined dimensions, extending upwards from the surface of the earth, established around an aerodrome for the protection of aerodrome traffic.

**Aeronautical chart.** A representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation.

**Aeronautical data.** A representation of aeronautical facts, concepts or instructions in a formalised manner suitable for communication, interpretation or processing.

**Aeronautical facility** means—

1. The various types of aeronautical communications systems used in either an aeronautical broadcast service or an aeronautical fixed service, that support IFR flight or an air traffic service; or
2. The ground elements of communication systems used for an aeronautical mobile service; or
3. The various types of radio navigation aids used for the aeronautical radio navigation service; or
4. Any other type of ground based telecommunication system that supports IFR flight or an air traffic service.

**Aeronautical fixed service (AFS) :** A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

**Aeronautical Information Circular (AIC).** A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP but which relates to flight safety, air navigation, technical, administrative or legislative matters.

**Aeronautical Information Publication (AIP).** A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

**Aeronautical Information Service (AIS).** A service established within the defined area of coverage responsible for the provision of aeronautical information/data necessary for the safety, regularity and efficiency of air navigation.

**Aeronautical Meteorological Station.** A station designated to make observations and meteorological reports for use in international air navigation.

**Aeronautical mobile service.** A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.

**Aeronautical mobile-satellite service.** A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radio beacon stations may also participate in this service.

**Aeronautical radio navigation service.** A radio navigation service intended for the benefit and for the safe operation of aircraft.

**Aeronautical Rescue Coordination Centre (ARCC).** A unit responsible for promoting efficient organisation of aeronautical SAR services and for coordinating the conduct of aeronautical SAR operations within a SRR.

**Aeronautical station (RR S1.81).** A land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.

**Aeronautical telecommunication service.** A telecommunication service provided for any aeronautical purpose.

**Aeronautical Telecommunication Station:** A station in the aeronautical telecommunication service.

**Aeroplane.** A power driven, heavier than air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

**Airborne collision avoidance system (ACAS).** An aircraft system based on secondary surveillance radar transponder signals which operates independently of ground-based equipment to provide information to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

**Aircraft.** Any machine that can derive support in the atmosphere from the reactions of the air other than the reaction of the air against the earth's surface.

**Aircraft Coordinator (ACO).** A person or team who coordinates the involvement of multiple aircraft in SAR operations in support of the SAR mission coordinator and the on-scene coordinator.

**Aircraft observation.** The evaluation of one or more meteorological elements made from an aircraft in flight.

**Air-Ground Communication.** Two way communication between aircraft and stations or locations on the surface of the earth.

**AIRMET Information.** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information regions concerned, or sub-area thereof.

**Air Navigation Services.** Services provided to air traffic during all phases of operations including air traffic service (ATS) communications, navigation and surveillance (CNS), meteorological services for air navigation (MET), search and rescue (SAR) and aeronautical information services (AIS).

**Air Navigation Service Provider.** Any organisation that is providing air navigation services to air traffic and that is functionally separated from its regulator.

**Airprox.** The code word used in an air traffic incident report to designate aircraft proximity

**Air-taxiing.** Movement of a helicopter above the surface of an aerodrome, normally in ground effect and at a speed normally less than 20kt.

**Air traffic.** All aircraft in flight or operating on the manoeuvring area of an aerodrome.

**Air traffic control clearance.** Authorisation for an aircraft to proceed under conditions specified by an air traffic control unit.

**Note 1:** For convenience, the term “air traffic control clearance” is frequently abbreviated to “clearance” when used in appropriate contexts.

**Note 2:** The abbreviated term “clearance” may be prefixed by the words “taxi, take-off, departure, en-route, approach, or landing” to indicate the particular portion of flight to which the air traffic control clearance relates.

**Air traffic control service.** A service provided for the purpose of:

1. Preventing collisions:
  - a. Between aircraft;
  - b. On the manoeuvring area, between aircraft and obstructions;
2. Expediting and maintaining an orderly flow of air traffic;
3. Providing information and advise useful for the safe and efficient conduct of flights; and
4. Notifying appropriate organisations regarding aircraft in need of search and rescue aid, and assisting such organisations as required.

**Air traffic control unit.** A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.

**Air traffic advisory service.** A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.

**Air traffic flow management (ATFM).** A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

**Air Traffic Management.(ATM)** The dynamic integrated management of air traffic and airspace—safely, economically and efficiently—through the provision of facilities and seamless services in collaboration with all parties.

**Air traffic service.** A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control services (area control, approach control, or aerodrome control services).

**Air traffic services airspaces.** Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.

*Note.— ATS airspaces are classified as Class A to G as described in 2.6. ANNEX11*

**Air traffic services reporting office.** A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

*Note.— An air traffic services reporting office may be established as a separate unit or combined with an existing unit, such as another air traffic services unit, or a unit of the aeronautical information service.*

**Air traffic services unit.** A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.

**Airway.** A control area or portion thereof established in the form of a corridor.

**Alerting service.** A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required.

**Alert phase.** A situation wherein apprehension exists as to the safety of an aircraft and its occupants

**Alerting post.** Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue sub-centre.

**Alerting service.** A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid and to assist such organisations as required.

**Alternate aerodrome.** An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or land at the aerodrome of intended landing. Alternate aerodromes include the following:

1. Take-off alternate. An alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure;
2. En-route alternate. An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route;
3. ETOPS en-route alternate. A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shutdown or other abnormal or emergency condition while en route in an ETOPS operation;
4. Destination alternate. An alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing.

*Note: The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.*

**Altitude.** The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).

**Approach control service.** An ATC service for arriving or departing controlled flights

**Approach control unit.** A unit established to provide ATC services to controlled flights arriving at or departing from one or more aerodromes.

**Approved ATS training organisation.** An organisation approved by the Authority in accordance with the requirements of Annex 1 to perform ATS training and operating under the supervision of the Authority.

**Approved by the Authority.** Means documented by the Authority as suitable for the purpose intended.

**Approved Unit Training Plan (AUTP).** An ATS unit training plan approved by the Authority.

**Apron.** A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or Maintenance.

**Apron management service.** A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.

**Appropriate ATS Authority.** The relevant authority designated by the State to be responsible for providing air traffic services in the airspace concerned.

**Area control centre (ACC).** A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

**Area control service.** Air traffic control service for controlled flights in control areas.

**Area navigation (RNAV).** A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of capability of self contained aids, or a combination of these.  
(*Note. Area navigation includes performance based navigation as well as other operations that do not meet the definition of performance based navigation.*)

**Area navigation route.** An ATS route established for the use of aircraft capable of employing area navigation.

**A/SMGCS.** Advanced Surface Movement Guidance and Control System. A system providing routing, guidance and surveillance for the control of aircraft and vehicles in order to maintain the declared surface movement rate under all weather conditions within the aerodrome visibility operational level (AVOL) while maintaining the required level of safety.

**ATC Examiner.** A person, meeting the requirements of Appendix 3, authorised to conduct examinations for the issue and renewal of Certificates of Competency at operational positions or sectors where the holder is currently competent.

**ATS occurrence.** Any event, including an accident, unlawful interference, serious incident or incident, associated with the operation of an aircraft, which could be hazardous to the safety of aircraft operations, or which compromises the provision of an Air Traffic Service.

**ATS provider.** An organisation providing air traffic services within certain airspace or at an airport.

**ATS route.** A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.

*Note 1.— The term “ATS route” is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.*

*Note 2.— An ATS route is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, as determined by the appropriate ATS authority, the lowest safe altitude.*

**ATS surveillance system.** A generic term meaning variously ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

**Authority.** Means the Civil Aviation and Met. Authority of the Republic of Yemen, the competent body responsible for the safety regulation of Civil Aviation

For the purpose of this Rule part, the Authority shall mean the Air Navigation and Aerodromes department of the Aviation Safety Affairs Sector.

**Automatic dependent surveillance (ADS).** A surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems, including aircraft identification, four dimensional position and additional data as appropriate.

**Automatic terminal information service (ATIS).** The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof:

**Data link-automatic terminal information service (D-ATIS).** The provision of ATIS via data link.

**Voice-automatic terminal information service (Voice-ATIS).** The provision of ATIS by means of continuous and repetitive voice broadcasts.

**Base turn.** A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.

*Note.— Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.*

**Break.** A time interval during a period of duty, during which the controller is relieved of all operational and administrative tasks.

**Briefing.** Oral commentary on existing and/or expected meteorological conditions.

**Calendar.** A discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day.

**Canopy level.** The surface of the earth supplemented by the vegetation height.

**Certificated CNS Maintenance unit.** A unit whose operator has been granted a CNS Maintenance Certificate.

**Change-over point.** The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omni-directional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.

*Note.— Change-over points are established to provide the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment.*

**Clearance limit.** The point to which an aircraft is granted an air traffic control clearance.

**CNS Maintenance Certificate.** A Certificate issued by the Authority under Civil Aviation Requirement VIII for the operation of a CNS Maintenance unit.

**CNS Maintenance Unit.** An organisation that provides Maintenance services to an CNS facilities supporting an ANS provider.

**CNS Manual.** The Manual that forms part of the application for an CNS Maintenance Certificate pursuant to these Regulations, including any amendments thereto accepted by the Authority

**Competent Authority.** The Civil Aviation and Met. Authority or any of its Departments to which supervision and development of civil aviation is assigned.

**Conditional Clearance.** An ATC clearance issued to an aircraft which does not become effective until a specified condition has been satisfied. The condition will normally relate to another aircraft or vehicle.

**Contour Line.** A line on a map or chart connecting points of equal elevation.

**Control area.** A controlled airspace extending upwards from a specified limit above the earth.

**Controlled aerodrome.** An aerodrome at which an ATC service is provided to aerodrome traffic.



Note. The term –controlled aerodrome|| indicates that an air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.

**Controlled airspace.** An airspace of defined dimensions within which ATC service is provided in accordance with the airspace classification.

*Note.— Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in 2.6.ANNEX11*

**Controller-pilot data link communications (CPDLC).** A means of communication between controller and pilot, using data link for ATC communications.

**Controlled flight.** Any flight which is subject to an ATC clearance.

**Control zone.** A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

**COSPAS-SARSAT system.** A satellite and ground station network that is designed to detect electronic distress beacons and to provide accurate, timely and reliable distress alert and location data to help search and rescue authorities assist persons in distress.

**Craft.** Any aircraft or marine surface vehicle or submersible.

**Cruising level.** A level maintained during a significant portion of a flight.

**Culture.** All man-made features constructed on the surface of the Earth, such as cities, railways and canals.

**Current flight plan.** The flight plan, including changes, if any, brought about by subsequent clearances.

**Cyclic redundancy check (CRC).** A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

**Danger area.** An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

**Data link communications.** A form of communication intended for the exchange of messages via a data link.

**Data quality.** A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution and integrity.

**Datum.** Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities.

**Declared capacity.** A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.

**Detect and avoid.** The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.

**Distress phase.** A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

**Downstream clearance.** A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.

**Elevation.** The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

**Ellipsoid height (Geodetic height).** The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.

**Emergency phase.** A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.

**Essential Traffic.** Essential traffic is controlled traffic to which the provision of separation by ATC is applicable, but which, in relation to a particular controlled flight is not, or will not be, separated from other controlled traffic by the appropriate separation minimum.

**Final Approach.** That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified—

1. At the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or
2. At the point of interception of the last track specified in the approach procedure; and
3. Ends at a point in the vicinity of an aerodrome from which:
  - a. a landing can be made; or
  - b. a missed approach procedure is initiated.

**Flight crew member.** A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

**Flight documentation.** Written or printed documents, including charts or forms, containing meteorological information for a flight.

**Flight information centre.** A unit established to provide flight information service and alerting service.

**Flight information region.** An airspace of defined dimensions within which flight information service and alerting service are provided.

**Flight information service.** A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

**Flight level.** A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.

**Flight plan.** Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

*Note.— Specifications for flight plans are contained in Annex 2. When the expression “flight plan form” is used it denotes the model flight plan form at Appendix 2 to the PANS-ATM.*

**Forecast.** A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

**Geodesic distance.** The shortest distance between any two points on a mathematically defined ellipsoidal surface.

**Geodetic datum.** A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

**Geoid.** The equipotential surface in the gravity field of the earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.

*Note: The geoid is irregular in shape because of local gravitational disturbances (wind, tides salinity, current etc) and the direction of gravity is perpendicular to the geoid at every point.*

**Geoid undulation.** The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.

*Note: In respect to the WGS-84 defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.*

**Gregorian calendar.** Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar.

**Ground level at its site.** Means the highest ground within a 600m radius of the site.

**Height.** The vertical distance of a level, point or an object considered as a point, measured from a specific datum.

**Heliport.** An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

**Human Factors principles.** Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

**Human performance.** Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

**IAMSAR manual.** The International Aeronautical and Maritime Search and Rescue Manual, a joint publication by the International Civil Aviation Organisation and the International Maritime Organisation that provides guidelines for a common aviation and maritime approach to organizing and providing SAR services.

**IFR flight.** A flight conducted in accordance with the instrument flight rules.

**Incident.** An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

*Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident/Incident Reporting Manual (ADREP Manual) (Doc 9156).*

**Instrument runway.** One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

1. Non-precision approach runway. An instrument runway served by visual aids and a non-visual aid providing at least directional guidance adequate for a straight-in approach.
2. Precision approach runway, category I. An instrument runway served by ILS and/or MLS and visual aids intended for operations with a decision height not lower than 60 m (200 ft) and either a visibility not less than 800 m or a runway visual range not less than 550 m.

3. Precision approach runway, category II. An instrument runway served by ILS and/or MLS and visual aids intended for operations with a decision height lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m.
4. Precision approach runway, category III. An instrument runway served by ILS and/or MLS to and along the surface of the runway and:
  - a. intended for operations with a decision height lower than 30 m (100 ft), or no decision height and a runway visual range not less than 175 m.
  - b. intended for operations with a decision height lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50 m.
  - c. intended for operations with no decision height and no runway visual range limitations.

*Note - Where decision height (DH) and runway visual range (RVR) fall into different categories of operation, the instrument approach and landing operation would be conducted in accordance with the requirements of the most demanding category (e.g. an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation).*

**Instrument Meteorological Conditions (IMC).** Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

**Integrated Aeronautical Information Package (IAIP).** A package which consists of the following elements:

1. AIP, including amendment service;
2. Supplements to the AIP;
3. NOTAM and PIB;
4. AIC; and
5. Checklists and lists of valid NOTAM.

**Integrity (aeronautical data).** A degree of assurance that an aeronautical data and its value has not been lost or altered since the data origination or authorized amendment.

**International airport.** Any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

**International NOTAM office (NOF).** An office designated by a State for the exchange of NOTAM internationally.

**Joint Rescue Coordination Centre (JRCC)** A rescue coordination centre responsible for both aeronautical and maritime search and rescue incidents.

**Level.** A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

**Local Competence Examiner.** A person, meeting the requirements of Appendix 3, authorised to conduct examinations for the renewal of Certificates of Competence, including re-issues following lapses of a validation of less than 12 months or suspensions from positions where the holder is currently competent.

**Manoeuvring area.** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

**Maritime Rescue Coordination Centre (MRCC)** A unit responsible for promoting efficient organisation of maritime SAR services and for coordinating the conduct of maritime SAR operations within a SRR.

**Marker.** An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

**Marking.** A symbol or group of symbols displayed on the surface of the movement area in order to convey aero-nautical information.

**Maintenance.** The term Maintenance includes the operation, regular Maintenance, repair, modification and overhaul of facilities.

**Meteorological Authority.** The authority providing or arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State.

**Meteorological bulletin.** A text comprising meteorological information preceded by an appropriate heading.

**Meteorological information.** Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

**Meteorological office.** An office designated to provide meteorological service for international air navigation.

**Meteorological report.** A statement of observed meteorological conditions related to a specific time and location.

**Movement area.** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

**Multilateration.** A ground-based independent cooperative ATM system, using transponder signals received by a number of ground based receivers and processed to calculate the position of origin of the signal.

**National SAR Plan.** A document that pertains to the SRRs, RCCs, and SAR-related functions for which one State is responsible and that describes how SAR services will be provided, organized and supported.

**Navigable airspace.** Airspace at or above the minimum flight altitudes prescribed by or under Civil Aviation Rules, including all legitimate low level operations but not including prohibited, restricted and danger areas.

**Navigation specification.** A set of aircraft and flight crew requirements needed to support performance-based navigation within a defined airspace. There are two kinds of navigation specification:

1. Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH.
2. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

*Note 1.— The Performance-based Navigation (PBN) Manual (Doc 9613), Volume II contains detailed guidance on navigation specifications.*

**Night Duty.** A period of duty of not less than four hours between 2200 hours and 0700 hours.

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

**Observation (meteorological)** The evaluation of one or more meteorological elements.

**Obstacle.** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft; or extend above a defined surface intended to protect aircraft in flight, or stand outside those defined surfaces and have been assessed as being a hazard to air navigation.

**Obstacle free zone (OFZ).** The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes.

**Obstacle limitation surface.** Surfaces defining the airspace around an aerodrome to be maintained free of obstacles so as to permit aeroplane operations at the aerodrome to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles around the aerodrome.

**Obstacle/terrain data collection surface.** A defined surface intended for the purpose of collecting obstacle/terrain data.

**Off Duty Period.** A period between operational, standby and or administration duty shifts of more than 24 hours.

**On-scene coordinator (OSC).** A person designated to coordinate SAR operations within a specified area.

**Operational Duty.** The period during which an air traffic controller is actually exercising the privileges of the Air Traffic Controller Licence at an operational position.

**Operator.** A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

**Orthometric height.** Height of a point related to the geoid, generally presented as a MSL elevation.

**Performance based navigation (PBN).** Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

*Note.— Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.*

**Pilot-in-command.** The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

**Period of Duty.** The period between the actual commencement of and the actual end of a shift during which an air traffic controller whose licence contains a rating valid at the unit exercises, or could be called upon to exercise, the privileges of the licence at that unit, and includes prescribed breaks, time spent on other duties such as training, airfield inspections, meteorological observations, administrative tasks and any extension of duty.

**Position (geographical).** Set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the earth.

**Precision.** The smallest difference that can be reliably distinguished by a measurement process.

**Pre-flight information bulletin (PIB).** A presentation of current NOTAM information of operational significance, prepared prior to flight.

*Note: In reference to geoid surveys, precision is a degree of refinement in performance of an operation or a degree of perfection in the instruments and methods used when taking measurements.*

**Printed Communications.** Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such a circuit.

**Problematic use of substances.** The use of one or more psychoactive substances by aviation personnel in a way that:

1. Constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
2. Causes or worsens an occupational, social, mental or physical problem or disorder.

**Prohibited area.** An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

**Psychoactive substances.** Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

**Quality.** Degree to which a set of inherent characteristics fulfils requirements.

*Note 1: The term “quality” can be used with adjectives such as poor, good or excellent.*

*Note 2: “Inherent”, as opposed to “assigned”, means existing in something, especially as a permanent characteristic.*

**Quality assurance.** Part of quality management focused on providing confidence that quality requirements will be fulfilled.

**Quality control.** Part of quality management focused on fulfilling quality requirements.

**Quality management.** Coordinated activities to direct and control an organisation with regard to quality.

**Quality system.** Documented organisational procedures and policies; internal audit of those procedures and policies; management review and recommendation for quality improvement.

**Radiotelephony.** A form of radiocommunication primarily intended for the exchange of information in the form of speech.

**Radio Navigation Aids.** ILS, MLS, GNSS, VOR, DME, NDB, and VHF marker beacons

**Radio Navigation Service.** A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids

**Rating.** An authorisation entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence.

**Rating Examiner.** A person, meeting the requirements of Appendix 4, authorised to conduct ATC college examinations and lead examination boards.

**RCP type.** A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability, and integrity.

**Recommended Practice.** Any specification for physical characteristics, configuration, materiel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interests of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavour to conform in accordance with the Convention.

**Relief.** The inequalities in elevation of the surface of the Earth, represented on aeronautical charts by contours, hypsometric tints, shading or spot elevations.

**Remotely piloted aircraft (RPA).** An unmanned aircraft which is piloted from a remote pilot station.

**Remotely piloted aircraft system (RPAS).** A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.

**Reporting point.** A specified geographical location in relation to which the position of an aircraft can be reported.

**Required Communication Performance.** A statement of the performance requirements for operational communication in support of specific ATM functions

**Required Navigation Performance (RNP).** A statement of the navigation performance necessary for operation within a defined airspace.

**Rescue.** An operation to retrieve persons in distress, provide for their initial medical and other needs and deliver them to a place of safety.

**Rescue Coordination Centre (RCC).** A unit responsible for promoting efficient organisation of SAR services and for coordinating the conduct of SAR operations within a SRR.

**Rescue sub-centre (RSC).** A unit subordinate to a rescue coordination centre, established to complement the latter according to particular provisions of the responsible authorities.

**Resolution.** A number of units or digits to which a measured or calculated value is expressed and used.

**Restricted area.** An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

**Route stage.** A route or portion of a route flown without an intermediate landing.



**RPA observer.** A trained and competent person designated by the operator who, by visual observation of the remotely piloted aircraft, assists the remote pilot in the safe conduct of the flight.

**Runway.** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

**Runway visual range (RVR).** The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

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

*Note.— In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.*

**Safety Management Postholder.** The member of management who shall be the responsible individual and focal point for the development and maintenance of an effective safety management system.

**Safety Management System (SMS).** A systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.

**Safety-sensitive personnel.** Persons who might endanger aviation safety if they perform their duties and functions improperly, including, but not limited to, crew members, aircraft maintenance personnel and air traffic controllers.

**Serious Incident.** An incident involving circumstances indicating that there was a high probability of an accident or where there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger, or apprehension exists as to the safety of the aircraft and its occupants, associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

**Search.** An operation normally coordinated by a rescue coordination centre or rescue sub-centre using available personnel and facilities to locate persons in distress.

**SAR Coordinator (SC).** A person within the SAR organisation with overall responsibility for establishing and providing SAR services and ensuring that planning for those services is properly coordinated.

**Search and Rescue Region (SRR).** An area of defined dimensions associated with a rescue coordination centre within which search and rescue services are provided.

**Search and Rescue Service.** The performance of distress monitoring, communication, coordination and other related functions including initial medical assistance and medical evacuation through the use of public and private resources including cooperating aircraft, vessels and other craft and installations.

**Search and Rescue Service Provider.** Any organisation that is providing search and rescue services and that is functionally separated from its regulator.

**Search and Rescue Unit (SRU).** A mobile unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations

**SIGMET information.** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

**Significant point.** A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

**SMGCS.** Surface Movement Guidance and Control System. A system of visual and non-visual aids, facilities, procedures and regulations designed to meet the particular requirements for guidance to, and control of, surface traffic consistent with the operational needs at a particular aerodrome.

**Special Use Airspace(SUA).** A collective expression for Danger, Restricted or Prohibited Areas.

**Special VFR flight.** A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

**Standard.** Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38.

**Standby Duty.** A period during which, by prior arrangement, a controller is required to be available to report at his place of work with the intention of providing an Air Traffic Control Service.

**State safety programme.** An integrated set of regulations and activities aimed at improving safety.

**Strayed Aircraft.** An aircraft which has deviated significantly from its intended track or which reports that it is lost.

**Station declination.** An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

**Taxiing.** Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.

**Terminal control area.** A control area normally established the confluence of ATS routes in the vicinity of one or more major aerodromes.

**Terrain.** The surface of the Earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow and excluding obstacles.

*Note: In practical terms, depending on the method of data collection used, terrain represents the continuous surface that exists at the bare Earth, the top of the canopy or something in-between, also known as “first reflective surface”.*

**Track.** The projection on the earth’s surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

**Traffic avoidance advice.** Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.

**Traffic information.** Information issued by an air traffic service unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.

**Transfer of control point.** A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.

**Transferring unit.** An air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight.

**Uncertainty phase.** A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

**Validation.** Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled.

**Verification.** Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.

*Note1: The term “verified” is used to designate the corresponding status.*

*Note2: Confirmation can comprise activities such as :*

1. *Performing alternative calculations;*
2. *Comparing a new design specification with a similar proven design specification;*
3. *Undertaking tests and demonstrations; and*
4. *Reviewing documents prior to issue.*

**VFR flight.** A flight conducted in accordance with the visual flight rules.

**Visual meteorological conditions (VMC).** Meteorological conditions expressed in terms of visibility, distance from cloud and ceiling, equal to or better than specified minima.

*Note.-The specified minima are contained in Annex 2*

**Visual line-of-sight (VLOS) operation.** An operation in which the remote pilot or RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

**Waypoint.** A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation, identified as either:

1. Fly by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or
2. Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

**World Meteorological Organisation (WMO).** The agency of the United Nations relating to climate, meteorology, hydrology and related geophysical sciences.

**(b) Acronyms**

The Acronyms/Abbreviations used in YCAR Part VIII have the following

meanings: ACAS Airborne collision avoidance system

ADS Automatic dependent surveillance

AFIS Aerodrome flight information service

AIP	Aeronautical information publication
AIRAC	Aeronautical information regulation and control
ALERFA	Alert phase
APP	Approach control
ATC	Air traffic control
AMSL	Above mean sea level
ATFM	Air traffic flow management
ATIS	Automatic terminal information service
ATM	Air traffic management
ATN	Aeronautical telecommunication network
ATS	Air traffic service
ATZ	Aerodrome traffic zone
AUTP	Approved Unit Training Plan
AWY	Airway
CNS	Communications, navigation and surveillance
CRC	Cyclical redundancy check
CTA	Control area
CTR	Control zone
DETRESFA	Distress phase
DME	Distance measurement equipment
FIR	Flight information region
FIS	Flight information service
FISA	Automated flight information service
GNSS	Global navigation satellite system
GPS	Global positioning system
GPWS	Ground Proximity Warning System

GUND	Geoid undulation
IFR	Instrument flight rules
ILS	Instrument landing system
IMC	Instrument meteorological conditions
INCERFA	Uncertainty phase
LOC	Localizer
LVC	Low visibility conditions
LVO	Low visibility operation/s
LVP	Low visibility procedure/s
MDA/H	Minimum descent altitude/height
MET	Meteorology
METAR	Aerodrome routine meteorological report
MLS	Microwave landing system
MSAW	Minimum safe altitude warning
NDB	Non-directional beacon
NOTAM	Notice to airmen
PANS	Procedures for air navigation services
PIB	Pre-flight information bulletin
QFE	Atmospheric pressure at aerodrome (or runway threshold) elevation
QNH	Altimeter subscale setting to obtain elevation when on ground
RCC	Rescue coordination centre
RCP	Required Communication Performance
RNAV	Area navigation
RNP	Required navigation performance

ROSI	Reporting of Safety Incidents
RTF	Radiotelephone
RVR	Runway visual range
RVSM	Reduced vertical separation minimum
RWY	Runway
SAR	Search and rescue
SID	Standard instrument departure
SIGMET	Information concerning en-route weather phenomena which may affect the safety of aircraft operations
SMC	Surface movement control
SMGCS	Surface movement guidance and control system
SMR	Surface movement radar
SPECI	Aerodrome special meteorological report
SSR	Secondary surveillance radar
STAR	Standard instrument arrival
SUA	Special Use Airspace
SUP	AIP Supplement
TCAS	Traffic Alert and Collision Avoidance System
TIBA	Traffic information broadcast by aircraft
TWR	Aerodrome control tower or aerodrome control
UIR	Upper flight information region
UTC	Coordinated Universal Time
UTP	Unit Training Plan
VFR	Visual flight rules
VMC	Visual meteorological conditions

VOR	Very high frequency omni-directional radio range
WGS- 84	World Geodetic System - 1984

*Note 1.— Throughout the text of this document the term “service” is used as an abstract noun to designate functions, or service rendered; the term “unit” is used to designate a collective body performing a service.*

**YCAR 1.3 COMMON REFERENCE SYSTEMS**

- (a) Horizontal reference system: World Geodetic System - 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system. Reported aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

*Note.— Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System — 1984 (WGS-84) Manual (Doc 9674).*

- (b) Vertical reference system: Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, shall be used as the vertical reference system

*Note.— The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents.*

- (c) Temporal reference system: The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system.
- (d) When a different temporal reference system is used, this shall be indicated in GEN 2.1.2 of the Aeronautical Information Publication (AIP).

**YCAR 1.4 UNITS OF MEASUREMENT**

- (a) Annex 5 contains specifications for the use of a standardized system of units of measurement in international civil aviation air and ground operations. This standardized system of units of measurement is based on the International System of Units (SI) and certain non-SI units considered necessary to meet the specialized requirements of international civil aviation.
- (b) Subject to YCAR 1.4.c, the units of measure used for aeronautical purposes in the Republic of Yemen are those specified in the International System of Units as adopted in Annex 5 to the ICAO Convention.
- (c) Non International System Units adopted by Annex 5 are used in accordance with the following table within the Yemen:

Quantity	Non SI symbol
Altitude	Feet (ft).





Distance	Nautical Miles (NM)
Elevations	Feet (ft).
Heights	Feet (ft).
Speed, including wind speed	Knots (kt)
Vertical speed	Feet per minute (ft/min)

**YCAR 1.5    RESERVED**

**YCAR 1.6    RESERVED**

**YCAR 1.7    RESERVED**

**YCAR 1.8    RESERVED**

**YCAR 1.9 RESERVED**

**YCAR 1.10 RESERVED**

**YCAR 1.11 RESERVED**

**YCAR 1.12 RESERVED**

**YCAR 1.13 OPERATIONAL APPROVAL**

(a) ATS provider shall obtain a no objection letter from the Authority prior to undertaking:

1. Installation of new equipment;
2. Introduction of new procedures;
3. Changes to the hours of operation of the service provided; and
4. Changes to any aspect of the service provided which may impact on safety.

(b) Details on how to apply and what information shall be provided will be contained in ANS Operational Approvals CAAP 25.

**SUBPART B —REQUIREMENTS**

**YCAR 1.14 RESERVED**

### **YCAR 1.15 FACILITY REQUIREMENTS**

- (a) ATS provider shall establish offices and facilities that—
1. Are appropriate for the service/s approved to be provided.
  2. Meet the applicable requirements of the facility CARs of the appropriate Subpart.

### **YCAR 1.16 DOCUMENTATION**

- (a) Each service provider shall –
1. Document the standards for the service provided
  2. Ensure that the format and standards take into account the circumstances under which the information will be used;
  3. Hold copies of relevant reference materials, standards, practices and procedures, and any other documentation that is necessary for the service/s approved to be provided.  
These documents shall include, but not be limited to those specifically listed in the documentation section of the appropriate Subpart.
- (b) The order of precedence of publications is as follows:
1. Yemen Civil Aviation Law
  2. Yemen Civil Aviation Regulations
  3. Other regulatory material published by the CAMA
  4. ICAO Annexes
  5. ICAO Documents.
- (c) ICAO Standards & Recommended Practices and Procedures for Air Navigation Services have the following regulatory status:

1. Standards: Mandatory unless specifically modified in the applicable parts of Supplements to the Annexes or in the Civil Aviation Regulations.
2. Recommended Practices: Non Mandatory.
3. PANS: Procedures for Air Navigation Services (PANS) shall be applied, with similar Mandatory status as for the SARPs, except where specifically deleted or modified in the Civil Aviation Regulations.
4. Definitions, tables, figures and appendices contained in ICAO Annexes are to be considered as Standards and therefore mandatory.
5. Attachments to ICAO Annexes are supplementary to SARPs or included as general guidance material. Where specific or general applications are considered necessary for additional safety levels, these are included in the Civil Aviation Regulations and carry Mandatory status.

(d) Each service provider shall establish a procedure to control all the documentation required by YCAR 1.16.a.3, to ensure that—

1. The documentation is reviewed and authorised by appropriate personnel before issue;
2. Current issues of relevant documentation are available to staff at all locations where they need access to such documentation for the service/s listed in their exposition;
3. All obsolete documentation is promptly removed from all points of issue or use;
4. Changes to documentation are reviewed and approved by appropriate personnel; and
5. The current version of each item of documentation can be identified to preclude the use of out of date editions.

### **YCAR 1.17 RECORDS**

- (a) Each-service provider shall establish procedures to identify, collect, index, store, maintain and dispose of the records that are necessary for the service/s approved to be provided-
- (b) Records shall be retained for at least the periods required in the appropriate Subpart.

### **YCAR 1.18 INTERNAL QUALITY ASSURANCE**

- (a) Each service provider shall establish internal quality assurance procedures to ensure compliance with, and the adequacy of, the procedures required by the relevant Subpart.
- (b) The quality system established in accordance with 18.1 shall be similar to ISO 9000 standards and shall be certified by an approved organization recognized by CAMA
- (c) The person who has responsibility for internal quality assurance shall have direct access to matters affecting the adequacy, accuracy, timeliness format and dissemination of the published aeronautical information.

- (d) The quality system shall provide users with the necessary assurance and confidence that the service being provided the provider meets stated requirements for data quality, data traceability and service provision in accordance with the requirements of the particular subpart.
- (e) The procedures required of the quality assurance system shall specify;
  - 1. The level and frequency of internal audits;
  - 2. The person or persons responsible for carrying out the internal audits;
  - 3. How the findings of the internal audits are to be recorded and reported
  - 4. How quality indicators such as error reports, incidents and complaints are incorporated into the internal quality assurance procedures;
  - 5. The means of rectifying any deficiencies found during an internal audit; and
  - 6. The documentation requirements for all aspects of the audit.
- (f) Where required in a particular Subpart, validation and verification procedures shall be established to ensure that quality requirements and traceability of aeronautical data are met.
- (g) Each service provider within which Subpart there are requirements for ensuring data integrity shall establish procedures to ensure that the integrity of aeronautical data is maintained throughout the data process from originator to the end user.
- (h) The following classifications and data integrity levels shall apply—
  - 1. Critical data, integrity level  $1 \times 10^{-8}$ ;
  - 2. Essential data, integrity level  $1 \times 10^{-5}$ ;
  - 3. Routine data, integrity level  $1 \times 10^{-3}$ ;
- (i) Aeronautical data quality requirements related to classification and data integrity shall be as provided in Tables A7-1 to A7-5 of Appendix 7 to ICAO Annex 15.
- (j) Each service provider shall establish procedures to ensure that protection of electronic aeronautical data while stored or in transit, shall be totally monitored by the cyclical redundancy check (CRC).
- (k) Each service provider shall establish procedures to record, investigate, correct, and report any errors that are detected in the service provided.

The procedures shall ensure that—

- 1. The error is corrected by the most appropriate means relative to the operational significance of the error;
- 2. The correction is clearly identified in the republished information;
- 3. The source of the error is identified and, where possible, eliminated; and
- 4. Where the error is a reportable error as required in the particular Subpart, the Authority, shall be notified of the error and the correction process followed

### **YCAR 1.19 SAFETY MANAGEMENT**

- (a) Each Air Navigation Service Provider shall establish a safety management system in accordance with YCAR Part X.
- (b) The safety management system shall be appropriate to the size, nature and complexity of the operations authorized to be conducted ~~under its operations certificate~~ and shall include:
  - 1. Hazard identification;
  - 2. Risk management;
  - 3. Safety assurance;
  - 4. Safety performance monitoring, auditing and measurement;
  - 5. Change management; and
  - 6. Management Reviews.
- (c) A service provider shall ensure that any significant change to the service, facility or facilities used in providing the service, shall be subject to a safety assessment, indicating that an acceptable level of safety shall be met, prior to implementation.
- (d) User consultation shall form part of the safety assessment.
- (e) The safety assessment shall be presented to, and accepted by, the Authority prior to implementation of the change.

### **YCAR 1.20 ORGANISATIONAL EXPOSITION**

- (a) Each air navigation service (ANS) provider shall provide the Authority with an exposition containing –
  - 1. A statement signed by the Head of the service confirming that—
    - i. the—exposition and any included manuals define the organisation and demonstrate its means and methods for ensuring ongoing compliance with this Subpart;
    - ii. the exposition and any included manuals will be complied with at all times;

2. A list of the service/s to be covered and the locations at which the service/s will be provided;
  3. A summary of the applicant's staffing structure for each service listed under YCAR 1.20.a.5;
  4. Details of the applicant's procedures required by the relevant CARs within each Subpart regarding—
    - i. the competence of personnel;
    - ii. the control of documentation;
    - iii. the collection of information;
    - iv. the publication of aeronautical information;
    - v. the identification, collection, indexing, storage, maintenance, and disposal of records;
    - vi. internal quality assurance;
    - vii. safety management; and
  5. Procedures to control, amend and distribute the exposition
- (b) The exposition shall be acceptable to the Authority.

## **SUBPART C — OPERATING REQUIREMENTS**

### **YCAR 1.21 CONTINUED COMPLIANCE**

- (a) Each service provider shall—
1. Comply with the continued compliance aspects of the relevant Subpart;
  2. Continue to meet the standards and comply with the requirements prescribed for certification of this Subpart;
  3. Notify the Authority of any change of address for service, telephone number or facsimile number required by the CAMA application form related to the service intended, within 28 days of the change.

### **YCAR 1.22 SAFETY INSPECTIONS AND AUDITS**

- (a) The Authority may, in writing, require the service provider to undergo or carry out such inspections and audits of the service's provider offices, facilities, documents and records.
- (b) The Authority may require from the service provider such information as the Authority considers relevant to the inspection or audit.
- (c) CAMA Inspectors shall be granted unrestricted access to airport and ANS facilities under all conditions. CAMA Inspectors shall be permitted to carry laptop computers, digital cameras and audio recording devices under all conditions for safety inspections, audits and investigations.