

**GEN 2.2 ABBREVIATIONS USED IN AIS PUBLICATIONS**

Abbreviations marked by asterisks (\*) are either different from or not contained in ICAO DOC 8400.

|          |                                                                                                    |          |                                                                                                                   |
|----------|----------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------|
| .        |                                                                                                    | AP       | Airport                                                                                                           |
| ... C    | Centre (preceded by runway designation number to identify a parallel runway)                       | APCH     | Approach                                                                                                          |
| ... L    | Left (preceded by runway designation number to identify a parallel runway)                         | APN      | Apron                                                                                                             |
| ... R    | Right (preceded by runway designation number to identify a parallel runway)                        | APP      | Approach control office or approach control or approach control service                                           |
| <b>4</b> |                                                                                                    | APR      | April                                                                                                             |
| 4D/15 *  | Four dimensional (latitude, longitude, altitude, time) position information at 15 minutes interval | APRX     | Approximate or approximately                                                                                      |
| <b>A</b> |                                                                                                    | APU      | Auxiliary power unit                                                                                              |
| A/A      | Air-to-air                                                                                         | APV      | Approach procedure with vertical guidance                                                                         |
| A/G      | Air-to-ground                                                                                      | ARC      | Area Chart                                                                                                        |
| AAIM     | Aircraft autonomous integrity monitoring                                                           | ARO      | Air traffic services reporting office                                                                             |
| AAL      | Above aerodrome level                                                                              | ARP      | Aerodrome reference point                                                                                         |
| AAR      | Air to air refuelling                                                                              | ARR      | Arrive or arrival or Arrival (message type designator)                                                            |
| ABM      | Abeam                                                                                              | ASC      | Ascend to or ascending to                                                                                         |
| ABN      | Aerodrome beacon                                                                                   | ASDA     | Accelerate-stop distance available                                                                                |
| ABV      | Above                                                                                              | ASPH     | Asphalt                                                                                                           |
| ACAS     | Airborne collision avoidance system                                                                | ASTO *   | Aeroshell turbine oil                                                                                             |
| ACC      | Area control centre or area control                                                                | ATA      | Actual time of arrival                                                                                            |
| ACCID    | Notification of an aircraft accident                                                               | ATC      | Air traffic control (in general)                                                                                  |
| ACFT     | Aircraft                                                                                           | ATD      | Actual time of departure                                                                                          |
| ACK      | Acknowledge                                                                                        | ATFM     | Air traffic flow management                                                                                       |
| ACL      | Altimeter check location                                                                           | ATIS     | Automatic terminal information service                                                                            |
| ACPT     | Accept or accepted                                                                                 | ATM      | Air Traffic Management                                                                                            |
| ACT      | Active or activated or activity                                                                    | ATN      | Aeronautical telecommunication network                                                                            |
| AD       | Aerodrome                                                                                          | ATS      | Air traffic services                                                                                              |
| ADA      | Advisory area                                                                                      | ATTN     | Attention                                                                                                         |
| ADC      | Aerodrome Chart                                                                                    | ATZ      | Aerodrome traffic zone                                                                                            |
| ADDN     | Addition or additional                                                                             | AUG      | August                                                                                                            |
| ADF      | Automatic direction finding equipment                                                              | AUTO     | Automatic                                                                                                         |
| ADIZ     | Air defence identification zone                                                                    | AUW      | All up weight                                                                                                     |
| ADJ      | Adjacent                                                                                           | AUX      | Auxiliary                                                                                                         |
| ADR      | Advisory route                                                                                     | AVBL     | Available or availability                                                                                         |
| ADS-B    | Automatic dependent surveillance-broadcast                                                         | AVGAS    | Aviation gasoline                                                                                                 |
| ADS-C    | Automatic dependent surveillance-contract                                                          | AWOS     | Automated Weather Observation System                                                                              |
| ADZ      | Advise                                                                                             | AWY      | Airway                                                                                                            |
| AFIS     | Aerodrome flight information service                                                               | AZM      | Azimuth                                                                                                           |
| AFS      | Aeronautical fixed service                                                                         | <b>B</b> |                                                                                                                   |
| AFT      | After...(time or place)                                                                            | BA       | Braking action                                                                                                    |
| AFTN     | Aeronautical fixed telecommunication network                                                       | BAROVNAV | Barometric vertical navigation                                                                                    |
| AGL      | Above ground level                                                                                 | BCN      | Beacon (Aeronautical ground light)                                                                                |
| AIC      | Aeronautical information circular                                                                  | BCST     | Broadcast                                                                                                         |
| AIDC     | Air traffic services interfacility data communications                                             | BDRY     | Boundary                                                                                                          |
| AIM      | Aeronautical information management                                                                | BLDG     | Building                                                                                                          |
| AIP      | Aeronautical information publication                                                               | BLW      | Below ...                                                                                                         |
| AIRAC    | Aeronautical information regulation and control                                                    | BOBCAT * | Bay of Bengal Cooperative Air Traffic Flow Management Advisory System                                             |
| AIREP    | Air-report                                                                                         | BRG      | Bearing                                                                                                           |
| AIS      | Aeronautical information services                                                                  | BRKG     | Braking                                                                                                           |
| ALERFA   | Alert phase                                                                                        | BTN      | Between                                                                                                           |
| ALRS     | Alerting service                                                                                   | <b>C</b> |                                                                                                                   |
| ALS      | Approach lighting system                                                                           | C        | Degrees Celsius (Centigrade)                                                                                      |
| ALT      | Altitude                                                                                           | CAAS *   | Civil Aviation Authority of Singapore                                                                             |
| AMA      | Area minimum altitude                                                                              | CAFHI *  | Changi Airport Fuel Hydrant Installation                                                                          |
| AMDT     | Amendment (AIP amendment)                                                                          | CAT      | Clear air turbulence                                                                                              |
| AMSL     | Above mean sea level                                                                               |          | (to be pronounced "KAV-OH-KAY") visibility, cloud and present weather better than prescribed values or conditions |
| ANSP *   | Air Navigation Service Provider                                                                    | CAVOK    |                                                                                                                   |
| AO       | Aircraft operator                                                                                  | CCO      | Continuous climb operations                                                                                       |
| AOC      | Aerodrome obstacle chart (followed by type and name/title)                                         | CDO      | Continuous descent operations                                                                                     |
|          |                                                                                                    | CDR      | Conditional route                                                                                                 |
|          |                                                                                                    | CH       | Channel                                                                                                           |
|          |                                                                                                    | CHG      | Modification (message type designator)                                                                            |
|          |                                                                                                    | CIV      | Civil                                                                                                             |

|          |                                                                           |          |                                                                              |
|----------|---------------------------------------------------------------------------|----------|------------------------------------------------------------------------------|
| CL       | Centre line                                                               | ELBA     | Emergency location beacon-aircraft                                           |
| CLBR     | Calibration                                                               | ELEV     | Elevation                                                                    |
| CLSD     | Close or closed or closing                                                | ELT      | Emergency locator transmitter                                                |
| CMB      | Climb to or climbing to                                                   | EM       | Emission                                                                     |
| CMPL     | Completion or completed or complete                                       | EMERG    | Emergency                                                                    |
| CNL      | Cancel or cancelled or flight plan cancellation (message type designator) | ENG      | Engine                                                                       |
| CNS      | Communications, Navigation and Surveillance                               | ENR      | Enroute                                                                      |
| COM      | Communications                                                            | ENRC     | Enroute Chart (followed by name/title)                                       |
| CONC     | Concrete                                                                  | EOBT     | Estimated off-block time                                                     |
| COND     | Condition                                                                 | EQPT     | Equipment                                                                    |
| CONST    | Construction or constructed                                               | EST      | Estimate or estimated or estimate (as message type designator)               |
| CONT     | Continue(s) or continued                                                  | ETA      | Estimated time of arrival or estimating arrival                              |
| COOR     | Coordinate or coordination                                                | ETD      | Estimated time of departure or estimating departure                          |
| COORD    | Coordinates                                                               | ETO      | Estimated time over significant point                                        |
| COP      | Change-over point                                                         | EV       | Every                                                                        |
| CPDLC    | Controller-pilot data link communications                                 | EXC      | Except                                                                       |
| CPL      | Current flight plan (message type designator)                             | EXER     | Exercises or exercising or to exercise                                       |
| CRC      | Cyclic redundancy check                                                   | EXP      | Expect or expected or expecting                                              |
| CRP      | Compulsory reporting point                                                | EXTD     | Extend or extending or Extended                                              |
| CS       | Call sign                                                                 | <b>F</b> |                                                                              |
| CTA      | Control area                                                              | FAC      | Facilities                                                                   |
| CTC      | Contact                                                                   | FAF      | Final approach fix                                                           |
| CTL      | Control                                                                   | FAP      | Final approach point                                                         |
| CTN      | Cautious                                                                  | FATO     | Final approach and take-off area                                             |
| CTO *    | Calculated Time-Over                                                      | FAX      | Facsimile transmission                                                       |
| CTOT *   | Calculated Take-off Time                                                  | FCST     | Forecast                                                                     |
| CTR      | Control zone                                                              | FCT      | Friction coefficient                                                         |
| CUST     | Customs                                                                   | FDPS     | Flight data processing system                                                |
| CWY      | Clearway                                                                  | FEB      | February                                                                     |
| <b>D</b> |                                                                           | FIC      | Flight information centre                                                    |
| D ...    | Danger area (followed by identification)                                  | FIR      | Flight information region                                                    |
| DA       | Decision altitude                                                         | FIS      | Flight information service                                                   |
| DCKG     | Docking                                                                   | FL       | Flight level                                                                 |
| DCPC     | Direct controller-pilot communications                                    | FLG      | Flashing                                                                     |
| DCT      | Direct (in relation to flight plan clearances and type of approach)       | FLR      | Flares                                                                       |
| DEC      | December                                                                  | FLT      | Flight                                                                       |
| DEG      | Degrees                                                                   | FLTCK    | Flight check                                                                 |
| DEP      | Depart or departure or Departure (message type designator)                | FLUC     | Fluctuating or fluctuation or fluctuated                                     |
| DER      | Departure end of the runway                                               | FLW      | Follow(s) or following                                                       |
| DES      | Descend to or descending to                                               | FLY      | Fly or flying                                                                |
| DEST     | Destination                                                               | FM       | Course from a fix to manual termination (used in navigation database coding) |
| DETRESFA | Distress phase                                                            | FMS      | Flight management system                                                     |
| DEV      | Deviation or deviating                                                    | FMU      | Flow management unit                                                         |
| DFTI     | Distances from touch down indicator                                       | FNA      | Final approach                                                               |
| DH       | Decision height                                                           | FOD *    | Foreign object damage                                                        |
| DIST     | Distance                                                                  | FPL      | Flight Plan                                                                  |
| DLA      | Delay or delayed or Delay (message type designator)                       | FREQ     | Frequency                                                                    |
| DLY      | Daily                                                                     | FRI      | Friday                                                                       |
| DME      | Distance measuring equipment                                              | FRNG     | Firing                                                                       |
| DNG      | Danger or dangerous                                                       | FSL      | Full stop landing                                                            |
| DOF      | Date of flight                                                            | FST      | First                                                                        |
| DPT      | Depth                                                                     | FT       | Feet (dimensional unit)                                                      |
| DR       | Dead reckoning                                                            | <b>G</b> |                                                                              |
| DRG      | During                                                                    | G/A      | Ground-to-air                                                                |
| DTG      | Date-time group                                                           | GA       | General Aviation                                                             |
| DTHR     | Displaced runway threshold                                                | GCA      | Ground controlled approach system or ground controlled approach              |
| DUR      | Duration                                                                  | GEN      | General                                                                      |
| DVOR     | Doppler VOR                                                               | GEO      | Geographic or true                                                           |
| <b>E</b> |                                                                           | GLD      | Glider                                                                       |
| E ...    | East or eastern longitude                                                 | GLONASS  | Global orbiting navigation satellite system                                  |
| EAT      | Expected approach time                                                    | GND      | Ground                                                                       |
| EET      | Estimated elapsed time                                                    | GNDCK    | Ground check                                                                 |

|          |                                                                                                                                   |          |                                                                                 |
|----------|-----------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------|
| GNSS     | Global navigation satellite system                                                                                                | INTRG    | Interrogator                                                                    |
| GOV      | Government                                                                                                                        | INTRP    | Interrupt or interruption or interrupted                                        |
| GP       | Glide path                                                                                                                        | INTST    | Intensity                                                                       |
| GPA      | Glide path angle                                                                                                                  | IRS      | Inertial reference system                                                       |
| GPS      | Global positioning system                                                                                                         | ISA      | International standard atmosphere                                               |
| GRASS    | Grass landing area                                                                                                                | <b>J</b> |                                                                                 |
| GS       | Ground speed                                                                                                                      | JAN      | January                                                                         |
| GUND     | Geoid undulation                                                                                                                  | JUL      | July                                                                            |
| <b>H</b> |                                                                                                                                   | JUN      | June                                                                            |
| H+ *     | Hours plus.....minutes past the hour                                                                                              | <b>K</b> |                                                                                 |
| H24      | Continuous day and night service                                                                                                  | KG       | Kilograms                                                                       |
| HBN      | Hazard beacon                                                                                                                     | KHZ      | Kilohertz                                                                       |
| HDG      | Heading                                                                                                                           | KM       | Kilometres                                                                      |
| HEL      | Helicopter                                                                                                                        | KMH      | Kilometres per hour                                                             |
| HEL-H *  | Heavy helicopter (radius of action, for rescue purposes, more than 370km (200NM) and capacity of evacuating more than 15 persons) | KPA      | Kilopascal                                                                      |
| HEL-L *  | Light helicopter (radius of action, for rescue purposes, up to 185km (100NM) and capacity of evacuating 1-5 persons)              | KT       | Knots                                                                           |
| HEL-M *  | Medium helicopter (radius of action, for rescue purposes, 185-370km (100- 200NM) and capacity of evacuating 6-15 persons)         | KW       | Kilowatts                                                                       |
| HF       | High frequency (3 000 to 30 000kHz)                                                                                               | <b>L</b> |                                                                                 |
| HGT      | Height or height above                                                                                                            | L        | Locator (see LM, LO)                                                            |
| HJ       | Sunrise to sunset                                                                                                                 | LAT      | Latitude                                                                        |
| HLDG     | Holding                                                                                                                           | LDA      | Landing distance available                                                      |
| HN       | Sunset to sunrise                                                                                                                 | LDAH     | Landing distance available, helicopter                                          |
| HO       | Service available to meet operational requirements                                                                                | LDG      | Landing                                                                         |
| HOL      | Holiday                                                                                                                           | LDI      | Landing direction indicator                                                     |
| HOSP     | Hospital aircraft                                                                                                                 | LEN      | Length                                                                          |
| HPA      | Hectopascal                                                                                                                       | LGT      | Light or lighting                                                               |
| HQ *     | Headquarters                                                                                                                      | LGTD     | Lighted                                                                         |
| HR       | Hours                                                                                                                             | LIH      | Light intensity high                                                            |
| HS       | Service available during hours of scheduled operations                                                                            | LIL      | Light intensity low                                                             |
| HUM      | Humanitarian                                                                                                                      | LIM      | Light intensity medium                                                          |
| HX       | No specific working hours                                                                                                         | LLZ      | Localizer                                                                       |
| HZ       | Haze or Hertz (cycle per second)                                                                                                  | LM       | Locator middle                                                                  |
| <b>I</b> |                                                                                                                                   | LNAV     | Lateral navigation                                                              |
| IAC      | Instrument approach chart (followed by name/title)                                                                                | LO       | Locator, outer                                                                  |
| IAF      | Initial approach fix                                                                                                              | LONG     | Longitude                                                                       |
| IAP      | Instrument approach procedure                                                                                                     | LORAN    | LORAN (Long range air navigation system)                                        |
| IAR      | Intersection of air routes                                                                                                        | LRG      | Long range                                                                      |
| IAS      | Indicated airspeed                                                                                                                | LT *     | Local time                                                                      |
| IBN      | Identification beacon                                                                                                             | LTD      | Limited                                                                         |
| ICAO     | International Civil Aviation Organisation                                                                                         | LVL      | Level                                                                           |
| ID       | Identifier or identify                                                                                                            | LVP      | Low visibility procedures                                                       |
| IDENT    | Identification                                                                                                                    | <b>M</b> |                                                                                 |
| IF       | Intermediate approach fix                                                                                                         | M        | Mach number (followed by figures) or Metres (preceded by figures)               |
| IFR      | Instrument flight rules                                                                                                           | MAD *    | Maximum Acceptable Delay                                                        |
| ILS      | Instrument landing system                                                                                                         | MAG      | Magnetic                                                                        |
| IM       | Inner marker                                                                                                                      | MAINT    | Maintenance                                                                     |
| IMC      | Instrument meteorological conditions                                                                                              | MAP      | Aeronautical maps and charts                                                    |
| INA      | Initial approach                                                                                                                  | MAPT     | Missed approach point                                                           |
| INBD     | Inbound                                                                                                                           | MAR      | March                                                                           |
| INCERFA  | Uncertainty phase                                                                                                                 | MAX      | Maximum                                                                         |
| INCORP   | Incorporated                                                                                                                      | MAY      | May                                                                             |
| INFO     | Information                                                                                                                       | MCA      | Minimum crossing altitude                                                       |
| INOP     | Inoperative                                                                                                                       | MDA      | Minimum descent altitude                                                        |
| INPR     | In progress                                                                                                                       | MDH      | Minimum descent height                                                          |
| INS      | Inertial navigation system                                                                                                        | MEA      | Minimum en-route altitude                                                       |
| INSTL    | Install or installed or installation                                                                                              | MEDEVAC  | Medical evacuation flight                                                       |
| INSTR    | Instrument                                                                                                                        | MEHT     | Minimum eye height over threshold (for visual approach slope indicator systems) |
| INT      | Intersection                                                                                                                      | MET      | Meteorological or meteorology                                                   |
| INTL     | International                                                                                                                     | METAR    | Aerodrome routine meteorological report (in meteorological code)                |
|          |                                                                                                                                   | MHA      | Minimum holding altitude                                                        |
|          |                                                                                                                                   | MHZ      | Megahertz                                                                       |
|          |                                                                                                                                   | MID      | Mid-point (related to RVR)                                                      |

|          |                                                                                                                                                                                                                                                                                  |          |                                                                      |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------|
| MIL      | Military                                                                                                                                                                                                                                                                         | PA       | Precision approach                                                   |
| MIN      | Minutes                                                                                                                                                                                                                                                                          | PALS     | Precision approach lighting system (specify category)                |
| MINDEF * | Ministry of Defence                                                                                                                                                                                                                                                              | PANS     | Procedures for air navigation services                               |
| MLS      | Microwave landing system                                                                                                                                                                                                                                                         | PAPI     | Precision approach path indicator                                    |
| MM       | Middle marker                                                                                                                                                                                                                                                                    | PAR      | Precision approach radar                                             |
| MNM      | Minimum                                                                                                                                                                                                                                                                          | PARA *   | Paragraph                                                            |
| MNPS     | Minimum navigation performance specifications                                                                                                                                                                                                                                    | PARL     | Parallel                                                             |
| MNT      | Monitor or monitoring or monitored                                                                                                                                                                                                                                               | PAX      | Passenger(s)                                                         |
| MNTN     | Maintain                                                                                                                                                                                                                                                                         | PBC      | Performance-based communication                                      |
| MOA      | Military operating area                                                                                                                                                                                                                                                          | PBN      | Performance-based navigation                                         |
| MOC      | Minimum obstacle clearance (required)                                                                                                                                                                                                                                            | PBS      | Performance-based surveillance                                       |
| MOCA     | Minimum obstacle clearance altitude                                                                                                                                                                                                                                              | PCD      | Proceed or proceeding                                                |
| MON      | Monday                                                                                                                                                                                                                                                                           | PCL      | Pilot-controlled lighting                                            |
| MOPS     | Minimum operational performance standards                                                                                                                                                                                                                                        | PCN      | Pavement classification number                                       |
| MOV      | Move or moving or movement                                                                                                                                                                                                                                                       | PDC      | Pre-departure clearance                                              |
| MPS      | Metres per second                                                                                                                                                                                                                                                                | PER      | Performance                                                          |
| MSA      | Minimum sector altitude                                                                                                                                                                                                                                                          | PERM     | Permanent                                                            |
| MSAW     | Minimum safe altitude warning                                                                                                                                                                                                                                                    | PIB      | Pre-flight information bulletin                                      |
| MSG      | Message                                                                                                                                                                                                                                                                          | PJE      | Parachute jumping exercise                                           |
| MSL      | Mean sea level                                                                                                                                                                                                                                                                   | PLA      | Practice low approach                                                |
| MWO      | Meteorological watch office                                                                                                                                                                                                                                                      | PN       | Prior notice required                                                |
| <b>N</b> |                                                                                                                                                                                                                                                                                  | PNR      | Point of no return                                                   |
| N        | North or northern latitude                                                                                                                                                                                                                                                       | POB      | Persons on board                                                     |
| NAV      | Navigation                                                                                                                                                                                                                                                                       | PPR      | Prior permission required                                            |
| NAVAID   | Navigation aid                                                                                                                                                                                                                                                                   | PRI      | Primary                                                              |
| NC       | No change                                                                                                                                                                                                                                                                        | PRKG     | Parking                                                              |
| NDB      | Non-directional radio beacon                                                                                                                                                                                                                                                     | PROC     | Procedure                                                            |
| NGT      | Night                                                                                                                                                                                                                                                                            | PSN      | Position                                                             |
| NM       | Nautical miles                                                                                                                                                                                                                                                                   | PSP      | Pierced steel plank                                                  |
| NML      | Normal                                                                                                                                                                                                                                                                           | PSR      | Primary surveillance radar                                           |
| NOF      | International NOTAM Office                                                                                                                                                                                                                                                       | PT *     | Point(s)                                                             |
| NONSTD   | Non-standard                                                                                                                                                                                                                                                                     | PTN      | Procedure turn                                                       |
| NOSIG    | No significant change (used in trend-type landing forecasts)                                                                                                                                                                                                                     | PVT *    | Private                                                              |
|          | 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 | PWR      | Power                                                                |
| NOTAM    |                                                                                                                                                                                                                                                                                  | <b>Q</b> |                                                                      |
|          |                                                                                                                                                                                                                                                                                  | QDM      | Magnetic heading (zero wind)                                         |
|          |                                                                                                                                                                                                                                                                                  | QDR      | Magnetic bearing                                                     |
|          |                                                                                                                                                                                                                                                                                  | QFE      | Atmospheric pressure at aerodrome elevation (or at runway threshold) |
| NOV      | November                                                                                                                                                                                                                                                                         | QFU      | Magnetic orientation of runway                                       |
| NR       | Number                                                                                                                                                                                                                                                                           | QNH      | Altimeter sub-scale setting to obtain elevation when on the ground   |
| <b>O</b> |                                                                                                                                                                                                                                                                                  | QTE      | True bearing                                                         |
| O/R      | On request                                                                                                                                                                                                                                                                       | QUAD     | Quadrant                                                             |
| OAC      | Oceanic area control centre                                                                                                                                                                                                                                                      | <b>R</b> |                                                                      |
| OAS      | Obstacle assessment surface                                                                                                                                                                                                                                                      | R ...    | Restricted area (followed by identification)                         |
| OBS      | Observe or observed or observation                                                                                                                                                                                                                                               | R ...    | Radial from VOR (followed by three figures)                          |
| OBST     | Obstacle                                                                                                                                                                                                                                                                         | RA       | Rain                                                                 |
| OCA      | Obstacle clearance altitude                                                                                                                                                                                                                                                      | RAD *    | Radius                                                               |
| OCC      | Occulting (light)                                                                                                                                                                                                                                                                | RAF *    | Royal Air Force                                                      |
| OCH      | Obstacle clearance height                                                                                                                                                                                                                                                        | RAG      | Runway arresting gear                                                |
| OCNL     | Occasional or occasionally                                                                                                                                                                                                                                                       | RAI      | Runway alignment indicator                                           |
| OCS      | Obstacle clearance surface                                                                                                                                                                                                                                                       | RAIM     | Receiver autonomous integrity monitoring                             |
| OCT      | October                                                                                                                                                                                                                                                                          | RB       | Rescue boat                                                          |
| OFZ      | Obstacle free zone                                                                                                                                                                                                                                                               | RCC      | Rescue coordination centre                                           |
| OHD      | Overhead                                                                                                                                                                                                                                                                         | RCF      | Radiocommunication failure (message type designator)                 |
| OM       | Out marker                                                                                                                                                                                                                                                                       | RCL      | Runway centre line                                                   |
| OPMET    | Operational meteorological (information)                                                                                                                                                                                                                                         | RCLL     | Runway centre line light(s)                                          |
| OPR      | Operator or operate or operative or operating or operational                                                                                                                                                                                                                     | RCP      | Required communication performance                                   |
| OPS      | Operations                                                                                                                                                                                                                                                                       | RDH      | Reference datum height                                               |
| OTP      | On top                                                                                                                                                                                                                                                                           | RDL      | Radial                                                               |
| OTS      | Organized track system                                                                                                                                                                                                                                                           | RDO      | Radio                                                                |
| OUBD     | Outbound                                                                                                                                                                                                                                                                         | REC      | Receive or receiver                                                  |
| <b>P</b> |                                                                                                                                                                                                                                                                                  | REDL     | Runway edge light(s)                                                 |
| P ...    | Prohibited area (followed by identification)                                                                                                                                                                                                                                     |          |                                                                      |

|          |                                                     |         |                                                         |
|----------|-----------------------------------------------------|---------|---------------------------------------------------------|
| REF      | Reference to ... or refer to ...                    | SGL     | Signal                                                  |
| REG      | Registration                                        | SIA *   | Singapore Airlines Limited                              |
| RENL     | Runway end light(s)                                 | SID     | Standard instrument departure                           |
| REP      | Report or reporting or reporting point              | SIG     | Significant                                             |
| REQ      | Request or requested                                |         | Information concerning en-route weather and other       |
| RESA     | Runway end safety area                              | SIGMET  | phenomena in the atmosphere that may affect the         |
| RFC *    | Radio facility chart                                |         | safety of aircraft operations                           |
| RFFS     | Rescue and fire fighting services                   | SIMUL   | Simultaneous or simultaneously                          |
| RH *     | Rescue helicopter                                   | SKED    | Schedule or scheduled                                   |
| RHC      | Right-hand circuit                                  | SMC     | Surface movement control                                |
| RIF      | Reclearance in flight                               | SMR     | Surface movement radar                                  |
| RLLS     | Runway lead-in lighting system                      | SOC     | Start of climb                                          |
| RMAF *   | Royal Malaysian Air Force                           |         | Aerodrome special meteorological report (in             |
| RMK      | Remark                                              | SPECI   | meteorological code)                                    |
| RNAV     | (to be pronounced "AR-NAV") Area navigation         |         | Local special meteorological report (in abbreviated     |
| RNP      | Required navigation performance                     | SPECIAL | plain language)                                         |
| ROC      | Rate of climb                                       | SPL     | Supplementary flight plan (message type designator)     |
| ROD      | Rate of descent                                     | SPOT    | Spot wind                                               |
| RPI      | Receiving only                                      | SQ      | Squall                                                  |
| RPLC     | Replace or replaced                                 | SR      | Sunrise                                                 |
| RPS      | Radar position symbol                               | SRA     | Surveillance radar approach                             |
| RQMNTS   | Requirements                                        | SRE     | Surveillance radar element of precision approach        |
| RQP      | Request flight plan (message type designator)       |         | radar system                                            |
| RQS      | Request supplementary flight plan (message type     | SRR     | Search and rescue region                                |
|          | designator)                                         | SRY     | Secondary                                               |
| RSAF *   | Republic of Singapore Air Force                     | SS      | Sunset                                                  |
| RSC      | Rescue sub-centre                                   | SSR     | Secondary surveillance radar                            |
| RSCD     | Runway surface condition                            | STA     | Straight-in approach                                    |
| RSFC *   | Republic of Singapore Flying Club                   | STAR    | Standard instrument arrival                             |
| RSP      | Required surveillance performance                   | STD     | Standard                                                |
| RSP      | Responder beacon                                    | STN     | Station                                                 |
| RSR      | En-route surveillance radar                         | STOL    | Short take-off and landing                              |
| RTE      | Route                                               | STS     | Status                                                  |
| RTF      | Radiotelephone                                      | STT *   | Standard Taxi Time                                      |
| RTHL     | Runway threshold light(s)                           | STWL    | Stopway light(s)                                        |
| RTN      | Return or returned or returning                     | SUBJ    | Subject to                                              |
| RTODAH   | Rejected take-off distance available, helicopter    | SUN     | Sunday                                                  |
| RTT      | Radioteletypewriter                                 | SUP     | Supplement (AIP Supplement)                             |
| RTZL     | Runway touchdown zone light(s)                      | SUPPS   | Regional supplementary procedures                       |
| RUT      | Standard regional route transmitting frequencies    | SVCBL   | Serviceable                                             |
| RV       | Rescue vessel                                       | SWY     | Stopway                                                 |
| RVA      | Radar vectoring area                                | T       |                                                         |
| RVR      | Runway visual range                                 | TA      | Traffic advisory                                        |
|          | Reduced vertical separation minimum                 | TAA     | Terminal arrival altitude                               |
| RVSM     | (300m(1000ft)) between FL290 and FL410              | TACAN   | UHF tactical air navigation aid                         |
| RWY      | Runway                                              | TAF     | Aerodrome forecast (in meteorological code)             |
| <b>S</b> |                                                     | TAIL    | Tail wind                                               |
| S        | South or southern latitude                          | TAR     | Terminal area surveillance radar                        |
| SAF *    | Singapore Armed Forces                              | TAS     | True airspeed                                           |
| SALS     | Simple approach lighting system                     | TAX     | Taxiing or taxi                                         |
| SAR      | Search and rescue                                   |         | Traffic alert and collision avoidance system resolution |
| SARPS    | Standards and recommended practices (ICAO)          | TCAS RA | advisory                                                |
| SAT      | Saturday                                            | TCH     | Threshold crossing height                               |
| SATCC *  | Singapore Air Traffic Control Centre                | TDZ     | Touchdown zone                                          |
|          | Satellite communication (used only when referring   | TECR    | Technical reason                                        |
| SATCOM   | generally to both voice and data satellite          | TEL     | Telephone                                               |
|          | communication or only data satellite communication) | TEMPO   | Temporary or temporarily                                |
| SATVOICE | Satellite voice communication                       | TFC     | Traffic                                                 |
| SDBY     | Stand by                                            | TGL     | Touch-and-go landing                                    |
| SDF      | Step down fix                                       | TGS     | Taxiing guidance system                                 |
| SEC      | Seconds                                             | THR     | Threshold                                               |
| SELCAL   | Selective calling system                            | THRU    | Through                                                 |
| SEP      | September                                           | THU     | Thursday                                                |
| SER      | Service or servicing or served                      | TIBA    | Traffic information broadcast by aircraft               |
| SFC      | Surface                                             | TIL     | Until                                                   |
| SFL *    | Sequenced flashing light                            | TKOF    | Take off                                                |

|          |                                                                         |          |                                                |
|----------|-------------------------------------------------------------------------|----------|------------------------------------------------|
| TLOF     | Touchdown and lift-off area                                             | WDI      | Wind direction indicator                       |
| TMA      | Terminal control area                                                   | WED      | Wednesday                                      |
| TOC      | Top of climb                                                            | WEF      | With effect from or effective from             |
| TODA     | Take-off distance available                                             | WGS-84   | World Geodetic System - 1984                   |
| TODAH    | Take-off distance available, helicopter                                 | WI       | Within                                         |
| TOP      | Cloud top                                                               | WID      | Width or wide                                  |
| TORA     | Take-off run available                                                  | WIE      | With immediate effect or effective immediately |
| TP       | Turning point                                                           | WIP      | Work in progress                               |
| TR       | Track                                                                   | WPT      | Way-point                                      |
| TRA      | Temporary reserved airspace                                             | WRNG     | Warning                                        |
| TRANS    | Transmits or transmitter                                                | WS       | Wind shear                                     |
| TRG      | Training                                                                | WSPD     | Wind speed                                     |
| TRL      | Transition level                                                        | WT       | Weight                                         |
| TT       | Teletypewriter                                                          | WUT *    | Wheels Up Time                                 |
| TUE      | Tuesday                                                                 | WX       | Weather                                        |
| TURB     | Turbulence                                                              | WXR      | Weather radar                                  |
| T-VASIS  | T visual approach slope indicator system                                | <b>X</b> |                                                |
| TWR      | Aerodrome control tower or aerodrome control                            | XBAR     | Crossbar (of approach lighting system)         |
| TWY      | Taxiway                                                                 | XNG      | Crossing                                       |
| TXL      | Taxilane                                                                | <b>Y</b> |                                                |
| TYP      | Type of aircraft                                                        | YCZ      | Yellow caution zone (runway lighting)          |
| TYPH     | Typhoon                                                                 |          |                                                |
| <b>U</b> |                                                                         |          |                                                |
| U/S      | Unserviceable                                                           |          |                                                |
| UAC      | Upper area control centre                                               |          |                                                |
| UAR      | Upper air route                                                         |          |                                                |
| UFN      | Until further notice                                                    |          |                                                |
| UHF      | Ultra high frequency (300 to 3 000 MHz)                                 |          |                                                |
| UIC      | Upper information centre                                                |          |                                                |
| UIR      | Upper flight information region                                         |          |                                                |
| ULM      | Ultra light motorized aircraft                                          |          |                                                |
| UNL      | Unlimited                                                               |          |                                                |
| UNREL    | Unreliable                                                              |          |                                                |
| UTA      | Upper control area                                                      |          |                                                |
| UTC      | Coordinated universal time                                              |          |                                                |
| <b>V</b> |                                                                         |          |                                                |
| VA       | Volcanic ash                                                            |          |                                                |
| VAAC     | Volcanic ash advisory centre                                            |          |                                                |
| VAC      | Visual approach chart (followed by name/title)                          |          |                                                |
| VAR      | Magnetic variation                                                      |          |                                                |
| VASIS    | Visual approach slope indicator system                                  |          |                                                |
| VCY      | Vicinity                                                                |          |                                                |
| VER      | Vertical                                                                |          |                                                |
| VFR      | Visual flight rules                                                     |          |                                                |
| VHF      | Very high frequency (30 to 300 MHz)                                     |          |                                                |
| VIP      | Very important person                                                   |          |                                                |
| VIS      | Visibility                                                              |          |                                                |
| VLR      | Very long range                                                         |          |                                                |
| VMC      | Visual meteorological conditions                                        |          |                                                |
| VNAV     | Vertical navigation                                                     |          |                                                |
| VOLMET   | Meteorological information for aircraft in flight                       |          |                                                |
| VOR      | VHF omnidirectional radio range                                         |          |                                                |
| VORTAC   | VOR and TACAN combination                                               |          |                                                |
| VOT      | VOR airborne equipment test facility                                    |          |                                                |
| VRB      | Variable                                                                |          |                                                |
| VSA      | By visual reference to the ground                                       |          |                                                |
| VSP      | Vertical speed                                                          |          |                                                |
| VTOL     | Vertical take-off and landing                                           |          |                                                |
| VVIP *   | Very, very important person                                             |          |                                                |
| <b>W</b> |                                                                         |          |                                                |
| W        | West or western longitude or White                                      |          |                                                |
| WAAS     | Wide area augmentation system                                           |          |                                                |
| WAC      | World Aeronautical Chart - ICAO 1:1 000 000<br>(followed by name/title) |          |                                                |
| WBAR     | Wing bar lights                                                         |          |                                                |