Doc 8400
Amendment No. 33
8/**11/18**

AMENDMENT No. 33

TO THE

PROCEDURES

FOR

AIR NAVIGATION SERVICES

ICAO ABBREVIATIONS AND CODES

NINTH EDITION — 2016

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Checklist of Amendments
to the PANS-ABC (Doc 8400), Ninth Edition

	Date of applicability
Ninth Edition (incorporates Amendments 1-32)	10 November 2016
Amendment No. 33 (approved by the President of the Council of ICAO on behalf of the Council on 29 June 2018) Replacement pages viii, ix, xiii, 1-5, 1-6, 1-7, 1-9, 1-10, 1-15, 1-23 through 1-35, 3-1, 3-3, 7-1, 7-3, 7-4	8 November 2018

Transmittal note

Amendment No. 33

to the

Procedures for Air Navigation Services

ICAO ABBREVIATIONS AND CODES
(Doc 8400)

1. Insert the following replacement pages in the PANS-ABC (Ninth Edition) to incorporate Amendment No. 33 which becomes applicable on 8 November 2018:

a)	Pages viii, ix and xiii	—	Foreword
b)	Pages 1-5, 1-6, 1-7, 1-9, 1-10 and 1-15	—	Abbreviations — Decode
c)	Pages 1-23 through 1-35	—	Abbreviations — Encode
d)	Page 3-1	—	Abbreviations and terms to be transmitted as spoken words when used in radiotelephony — Decode
e)	Page 3-3	—	Abbreviations and terms to be transmitted as spoken words when used in radiotelephony — Encode
f)	Pages 7-1, 7-3 and 7-4`	—	The NOTAM Code

2. Record the entry of this amendment on page (iii).

31/10/18

FOREWORD

1. Introduction

This document contains abbreviations and codes approved by the Council of ICAO for worldwide use in the international aeronautical telecommunication service and in aeronautical information documents, as appropriate, uniform abbreviated phraseology for use in pre-flight information bulletins and ATS data link communications, with the status of Procedures for Air Navigation Services (in abbreviated form the PANS-ABC).

This document is the outgrowth of study by the Air Navigation Commission in consultation with States in the matter of controlling and coordinating abbreviations and codes. It brings together all abbreviations and codes for use in aircraft operations with the following exceptions:

a) *Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services* promulgated in Doc 8585.

b) Data designators and geographical designators for meteorological bulletins given in the *Manual of Aeronautical Meteorological Practice* (Doc 8896).

c) Aeronautical meteorological codes given in the *Manual of Aeronautical Meteorological Practice*.

d) Additional abbreviations for restricted use in aeronautical information services (AIS) documents given in the *Aeronautical Information Services Manual* (Doc 8126).

e) *Location Indicators* given in Doc 7910.

f) *Aircraft Type Designators* given in Doc 8643.

Table A shows the origin of each edition of the PANS-ABC issued since 1964 and subsequent amendments thereto, together with a list of the principal subjects involved, the dates on which the amendments were approved by the Council and the dates on which they became applicable.

2. Principles for formulation of abbreviations

The principles applied in the formulation of ICAO abbreviations are:

a) that allocation of more than one signification to a single abbreviation should be avoided except where it can be reasonably determined that no instances of misinterpretation would arise;

b) that allocation of more than one abbreviation to the same signification should be avoided even though a different use is prescribed;

c) that abbreviations should make use of the root word or words and should be derived from words common to the working languages except that where it is impracticable to apply this principle to best advantage, the abbreviation should follow the English text;

d) that the use of a singular or plural form for the signification of an abbreviation should be selected on the basis of the more common use;

e) that an abbreviation may represent grammatical variants of the basic signification where such application can be made without risk of confusion and the desired grammatical form can be determined from the context of the message.

With respect to the latter principle, several variants are given for a number of abbreviations where it might not be obvious that the variant is appropriate or acceptable.

3. Specifications governing the use of abbreviations

Specifications governing the use of abbreviations and codes are contained in the following ICAO Annexes and PANS:

a) use of abbreviations in the aeronautical information service: 1.3.4 of Annex 15;

b) use of the NOTAM Code: 5.2.6 of Annex 15;

c) use of abbreviations and codes in the international aeronautical telecommunications service: 3.7 of Annex 10, Volume II;

d) use of abbreviations on aeronautical charts: 2.3.3 and 2.9 of Annex 4;

e) use of abbreviations in plain language meteorological messages: Chapters 3, 4, 5, 6 and 7 and Appendices 1, 2, 3, 5 and 6 of Annex 3;

f) use of abbreviations in air-reports: 4.12 of Chapter 4 and Appendix 1 of PANS-ATM (Doc 4444);

g) use of abbreviations and designators in flight plans and other air traffic services messages: Chapters 11 and 16 and Appendices 2, 3, 5 and 6 of PANS-ATM (Doc 4444).

4. Status

The PANS do not have the same status as the Standards and Recommended Practices. While the latter are *adopted* by Council in pursuance of Article 37 of the Convention on International Civil Aviation, and are subject to the full procedure of Article 90, the PANS are *approved* by the Council and recommended to Contracting States for worldwide application.

5. Implementation

The implementation of procedures is the responsibility of Contracting States; they are applied in actual operations only after, and in so far as, States have enforced them. However, with a view to facilitating their processing towards implementation by States, this document has been prepared in a manner which will permit direct use by operational personnel.

6. Notification of differences

The PANS do not carry the status afforded to Standards adopted by the Council as Annexes to the Convention and, therefore, do not come within the obligation imposed by Article 38 of the Convention to notify differences in the event of non-implementation.

However, the attention of States is drawn to the provision in the *Procedures for Air Navigation Services — Aeronautical Information Management* (PANS-AIM, Doc 10066) related to the publication in Aeronautical Information Publications of a list of abbreviations and their respective significations used by the State in its Aeronautical Information Publications and in the dissemination of aeronautical data and aeronautical information. Differences from ICAO abbreviations or their significations should be identified.

7. Editorial presentation

For encoding purposes the abbreviations given in this document are divided among a "general" and several specialized categories. For the convenience of the user, there is some duplication among these categories. Nevertheless, it may be necessary to draw on the "general" category of abbreviations when composing messages using one of the specialized categories.

Certain Q Code signals which through constant use have attained plain language status have been placed with their plain language significations in the portion of this document which contains the "general" category abbreviations.

Throughout the document, decode material is printed on white paper, encode material on green paper.

Any errors, omissions or discrepancies should be brought to the attention of the Secretary General of ICAO, 999 Robert-Bourassa Boulevard, Montréal, Quebec, Canada H3C 5H7.

Table A. Amendments to the PANS-ABC

Amendment	*Source(s)*	*Subject(s)*	*Approved* *Applicable*
1st Edition (1964)	Air Navigation Commission	Study on the control and coordination of abbreviations and codes.	18 March 1964 1 November 1964
Amendment 1	MET/OPS Meeting (1964); Fifth Meeting of the Panel of Teletypewriter Specialists (1963)	Editorial and consequential amendments emanating from Amendment 44 to Annex 10, Amendment 9 to PANS-MET and Amendment 7 to PANS-RAC; addition and modification of meteorological abbreviations; amendment of abbreviations used on the AFTN.	7 June 1965 10 March 1966
Amendment 2	ICAO Secretariat	Consequential and editorial changes to the Foreword emanating from Air Navigation Commission and Council action on various regulatory and service documents.	25 August 1966
2nd Edition (1967) (includes Amendment 3)	AIS/MAP Divisional Meeting (1966)	Various changes to abbreviations and codes to reflect current operational requirements and practices.	13 June 1967 8 February 1968
Amendment 4	Air Navigation Commission	Consequential changes to abbreviations used for air traffic purposes emanating from Amendment 2 to the Eighth Edition of Doc 4444 (PANS-RAC).	4 April 1968 4 April 1968
Amendment 5	Air Navigation Commission	Consequential changes to abbreviations used for plain language meteorology messages, emanating from Amendment 14 to Doc 7605 (PANS-MET).	28 June 1968 9 January 1969
Amendment 6	Air Navigation Commission	Changes arising from Assembly Resolution A16-19 and Amendment 54 to Annex 3.	23 January 1969 18 September 1969

Amendment	*Source(s)*	*Subject(s)*	*Approved* *Applicable*
3rd Edition (1971) (includes Amendments 7 and 8)	Air Navigation Commission	Study of NOTAM composition resulting in expanded use of abbreviations and codes in NOTAM Class I; changes in abbreviations emanating from revised aeronautical meteorological figure codes introduced by WMO; changes introduced as a result of clarification of air traffic control terms contained in ICAO regulatory documents.	19 March 1971 6 January 1972
Amendment 9	Air Navigation Commission	Consequential changes emanating from Amendment 1 to the Tenth Edition of Doc 4444 (PANS-RAC).	24 March 1972 7 December 1972
Amendment 10	Air Navigation Commission; Third Meeting of the Obstacle Clearance Panel (1971)	Consequential amendments to abbreviations and their significations (QFE and QNH); changes to meteorological abbreviations introduced by WMO.	21 March 1973 16 August 1973
Amendment 11	Air Navigation Commission; Seventh Air Navigation Conference (1972)	Addition of abbreviations RNAV and STAR; deletion of abbreviation SIA.	29 May 1973 23 May 1974
Amendment 12	Air Navigation Commission	Inclusion of additional abbreviations for use in the NOTAM Code.	11 December 1974 9 October 1975
Amendment 13	Air Navigation Commission; Eighth Air Navigation Conference (1974)	Additions, deletions and changes in significations of abbreviations mainly emanating from amendments to Annex 3.	8 December 1975 12 August 1976
Amendment 14	Air Navigation Commission; Ninth Air Navigation Conference (1976)	Addition of abbreviations COP, INOP, MRP, RPS and WPT; change in signification of abbreviation ACP as a consequence of Amendment 30 to Annex 14.	9 December 1977 10 August 1978
Amendment 15	Air Navigation Commission	Additions and changes in signification of abbreviations.	26 February 1979 29 November 1979
Amendment 16	Air Navigation Commission	Additions, deletions and changes in signification of abbreviations emanating from a study of abbreviations in common use in States' aeronautical information publications.	11 March 1981 26 November 1981
Amendment 17	Air Navigation Commission	Extensive amendment of abbreviations and codes emanating from a proposal submitted by the United Kingdom.	14 December 1981 9 June 1983
Amendment 18	Air Navigation Commission	Extensive addition of abbreviations and codes consequential to a study of the revision of the NOTAM Code; addition of abbreviations used in Doc 8168 (PANS-OPS).	11 June 1982 9 June 1983
Amendment 19	Air Navigation Commission; Third Meeting of the ATS Data Acquisition, Processing and Transfer (ADAPT) Panel (1981)	Consequential changes emanating from Amendments 64 and 65 to Annex 3, Amendment 14 to Annex 5, Recommendations 1/5 and 3/1 of ADAPT/3, and a new ITU method of designating radio emissions.	15 March 1985 21 November 1985

Amendment	*Source(s)*	*Subject(s)*	*Approved* *Applicable*
Ninth Edition (2016) (includes Amendment 32)	Fifty-fourth Meeting of the European Air Navigation Planning Group (EANPG/54); Meteorology (MET) Divisional Meeting (2014); fifth meeting of the Meteorological Warnings Study Group (METWSG/5); second meeting of the Operational Data Link Panel (OPLINKP/2); and the Secretariat.	Deletion of abbreviations not in common use; addition of new abbreviations consistent with common use in NOTAM associated with PBN implementation, AIM transition, meteorological warnings, PBCS and SATVOICE implementation; and consequential changes emanating from Amendment 77-A to Annex 3.	5 May 2016 10 November 2016
Amendment 33	Second meeting of the Meteorology Panel (METP/2); twelfth meeting of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG/12)	Amendment concerning provision of space weather information; and change of references concerning PANS-AIM.	29 June 2018 8 November 2018

DES	Descend to *or* descending to
DEST	Destination
DETRESFA†	Distress phase
DEV	Deviation *or* deviating
DF	Direction finding
DFDR	Digital flight data recorder
DFTI	Distance from touchdown indicator
DH	Decision height
DIF	Diffuse
DIST	Distance
DIV	Divert *or* diverting
DLA	Delay *or* delayed
DLA	Delay *(message type designator)*
DLIC	Data link initiation capability
DLY	Daily
DME‡	Distance measuring equipment
DNG	Danger *or* dangerous
DOF	Date of flight
DOM	Domestic
DP	Dew point temperature
DPT	Depth
DR	Dead reckoning
DR . . .	Low drifting *(followed by DU = dust, SA = sand or SN = snow)*
DRG	During
DS	Duststorm
DSB	Double sideband
DTAM	Descend to and maintain
DTG	Date-time group
DTHR	Displaced runway threshold
DTRT	Deteriorate *or* deteriorating
DTW	Dual tandem wheels
DU	Dust
DUC	Dense upper cloud
DUPE#	This is a duplicate message *(to be used in AFS as a procedure signal)*
DUR	Duration
D-VOLMET	Data link VOLMET
DVOR	Doppler VOR
DW	Dual wheels
DZ	Drizzle

E

E	East *or* eastern longitude
EAT	Expected approach time
EB	Eastbound
EDA	Elevation differential area
EDTO	Extended diversion time operations
EEE#	Error *(to be used in AFS as a procedure signal)*
EET	Estimated elapsed time
EFC	Expect further clearance
EFIS†	*(to be pronounced "EE-FIS")* Electronic flight instrument system
EGNOS†	*(to be pronounced "EGG-NOS")* European geostationary navigation overlay service
EHF	Extremely high frequency [30 000 to 300 000 MHz]
ELBA†	Emergency location beacon — aircraft
ELEV	Elevation
ELR	Extra long range
ELT	Emergency locator transmitter
EM	Emission
EMBD	Embedded in a layer *(to indicate cumulonimbus embedded in layers of other clouds)*
EMERG	Emergency
END	Stop-end *(related to RVR)*
ENE	East-north-east
ENG	Engine
ENR	En route
ENRC . . .	Enroute chart *(followed by name/title)*
EOBT	Estimated off-block time
EQN	Equatorial latitudes northern hemisphere
EQPT	Equipment
EQS	Equatorial latitudes southern hemisphere
ESE	East-south-east
EST	Estimate *or* estimated *or* estimation *(message type designator)*
ETA*‡	Estimated time of arrival *or* estimating arrival
ETD‡	Estimated time of departure *or* estimating departure
ETO	Estimated time over significant point

† *When radiotelephony is used, the abbreviations and terms are transmitted as spoken words.*

‡ *When radiotelephony is used, the abbreviations and terms are transmitted using the individual letters in non-phonetic form.*

* *Signal is also available for use in communicating with stations of the maritime mobile service.*

\# *Signal for use in the teletypewriter service only.*

EUR RODEX	European regional OPMET data exchange
EV	Every
EVS	Enhanced vision system
EXC	Except
EXER	Exercises *or* exercising *or* to exercise
EXP	Expect *or* expected *or* expecting
EXTD	Extend *or* extending *or* extended

F

F	Fixed
FA	Course from a fix to an altitude
FAC	Facilities
FAF	Final approach fix
FAL	Facilitation of international air transport
FAP	Final approach point
FAS	Final approach segment
FATO	Final approach and take-off area
FAX	Facsimile transmission
FBL	Light *(used to indicate the intensity of weather phenomena, interference or static reports, e.g. FBL RA = light rain)*
FC	Funnel cloud *(tornado or waterspout)*
FCST	Forecast
FCT	Friction coefficient
FDPS	Flight data processing system
FEB	February
FEW	Few
FG	Fog
FIC	Flight information centre
FIR‡	Flight information region
FIS	Flight information service
FISA	Automated flight information service
FL	Flight level
FLD	Field
FLG	Flashing
FLR	Flares
FLT	Flight
FLTCK	Flight check
FLUC	Fluctuating *or* fluctuation *or* fluctuated
FLW	Follow(s) *or* following
FLY	Fly *or* flying
FM	Course from a fix to manual termination *(used in navigation database coding)*
FM	From
FM . . .	From *(followed by time at which weather change is forecast to begin)*
FMC	Flight management computer
FMS‡	Flight management system
FMU	Flow management unit
FNA	Final approach
FPAP	Flight path alignment point
FPL	Flight plan
FPM	Feet per minute
FPR	Flight plan route
FR	Fuel remaining
FREQ	Frequency
FRI	Friday
FRNG	Firing
FRONT†	Front *(relating to weather)*
FROST†	Frost *(used in aerodrome warnings)*
FRQ	Frequent
FSL	Full stop landing
FSS	Flight service station
FST	First
FT	Feet *(dimensional unit)*
FTE	Flight technical error
FTP	Fictitious threshold point
FTT	Flight technical tolerance
FU	Smoke
FZ	Freezing
FZDZ	Freezing drizzle
FZFG	Freezing fog
FZRA	Freezing rain

G

G	Green
G . . .	Variations from the mean wind speed (gusts) *(followed by figures in METAR/SPECI and TAF)*
GA	General aviation
GA	Go ahead, resume sending *(to be used in AFS as a procedure signal)*

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G/A	Ground-to-air
G/A/G	Ground-to-air and air-to-ground
GAGAN†	GPS and geostationary earth orbit augmented navigation
GAIN	Airspeed or headwind gain
GAMET	Area forecast for low-level flights
GARP	GBAS azimuth reference point
GBAS†	*(to be pronounced "GEE-BAS")* Ground-based augmentation system
GCA‡	Ground controlled approach system *or* ground controlled approach
GEN	General
GEO	Geographic *or* true
GES	Ground earth station
GLD	Glider
GLONASS†	*(to be pronounced "GLO-NAS")* Global navigation satellite system
GLS‡	GBAS landing system
GMC . . .	Ground movement chart *(followed by name/title)*
GND	Ground
GNDCK	Ground check
GNSS‡	Global navigation satellite system
GOV	Government
GP	Glide path
GPA	Glide path angle
GPIP	Glide path intercept point
GPS‡	Global positioning system
GPU	Ground power unit
GPWS‡	Ground proximity warning system
GR	Hail
GRAS†	*(to be pronounced "GRASS")* Ground-based regional augmentation system
GRASS	Grass landing area
GRIB	Processed meteorological data in the form of grid point values expressed in binary form *(in meteorological code)*
GRVL	Gravel
GS	Ground speed
GS	Small hail and/or snow pellets
GUND	Geoid undulation

H

H	High pressure area *or* the centre of high pressure
H . . .	Significant wave height *(followed by figures in METAR/SPECI)*
H24	Continuous day and night service
HA	Holding/racetrack to an altitude
HAPI	Helicopter approach path indicator
HBN	Hazard beacon
HCH	Heliport crossing height
HDF	High frequency direction-finding station
HDG	Heading
HEL	Helicopter
HF	Holding/racetrack to a fix
HF‡	High frequency [3 000 to 30 000 kHz]
HGT	Height *or* height above
HJ	Sunrise to sunset
HLDG	Holding
HLP	Heliport
HLS	Helicopter landing site
HM	Holding/racetrack to a manual termination
HN	Sunset to sunrise
HNH	High latitudes northern hemisphere
HO	Service available to meet operational requirements
HOL	Holiday
HOSP	Hospital aircraft
HPA	Hectopascal
HR	Hours
HRP	Heliport reference point
HS	Service available during hours of scheduled operations
HSH	High latitudes southern hemisphere
HUD	Head-up display
HUM	Humanitarian
HURCN	Hurricane
HVDF	High and very high frequency direction-finding stations *(at the same location)*
HVY	Heavy
HVY	Heavy *(used to indicate the intensity of weather phenomena, e.g. HVY RA = heavy rain)*
HX	No specific working hours
HYR	Higher
HZ	Haze
HZ	Hertz *(cycle per second)*

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I

IAC . . .	Instrument approach chart *(followed by name/title)*
IAF	Initial approach fix
IAO	In and out of clouds
IAP	Instrument approach procedure
IAR	Intersection of air routes
IAS	Indicated airspeed
IBN	Identification beacon
ICAO	International Civil Aviation Organization
ICE	Icing
ID	Identifier *or* identify
IDENT†	Identification
IF	Intermediate approach fix
IFF	Identification friend/foe
IFR‡	Instrument flight rules
IGA	International general aviation
ILS‡	Instrument landing system
IM	Inner marker
IMC‡	Instrument meteorological conditions
IMG	Immigration
IMI*	Interrogation sign (question mark) *(to be used in AFS as a procedure signal)*
IMPR	Improve *or* improving
IMT	Immediate *or* immediately
INA	Initial approach
INBD	Inbound
INC	In cloud
INCERFA†	Uncertainty phase
INCORP	Incorporated
INFO†	Information
INOP	Inoperative
INP	If not possible
INPR	In progress
INS	Inertial navigation system
INSTL	Install *or* installed *or* installation
INSTR	Instrument
INT	Intersection
INTL	International
INTRG	Interrogator
INTRP	Interrupt *or* interruption *or* interrupted
INTSF	Intensify *or* intensifying
INTST	Intensity
IR	Ice on runway
IRS	Inertial reference system
ISA	International standard atmosphere
ISB	Independent sideband
ISOL	Isolated

J

JAN	January
JTST	Jet stream
JUL	July
JUN	June

K

KG	Kilograms
KHZ	Kilohertz
KIAS	Knots indicated airspeed
KM	Kilometres
KMH	Kilometres per hour
KPA	Kilopascal
KT	Knots
KW	Kilowatts

L

. . . L	Left *(preceded by runway designation number to identify a parallel runway)*
L	Litre
L	Locator
L	Low pressure area *or* the centre of low pressure
LAM	Logical acknowledgement *(message type designator)*
LAN	Inland
LAT	Latitude
LCA	Local *or* locally *or* location *or* located
LDA	Landing distance available
LDAH	Landing distance available, helicopter
LDG	Landing
LDI	Landing direction indicator
LEN	Length
LF	Low frequency [30 to 300 kHz]
LGT	Light *or* lighting
LGTD	Lighted

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LIH	Light intensity high
LIL	Light intensity low
LIM	Light intensity medium
LINE	Line *(used in SIGMET)*
LM	Locator, middle
LMT	Local mean time
LNAV†	*(to be pronounced "EL-NAV")* Lateral navigation
LNG	Long *(used to indicate the type of approach desired or required)*
LO	Locator, outer
LOC	Localizer
LONG	Longitude
LORAN†	LORAN *(long range air navigation system)*
LOSS	Airspeed or headwind loss
LPV	Localizer performance with vertical guidance
LR	Last message received by me was . . . *(to be used in AFS as a procedure signal)*
LRG	Long range
LS	Last message sent by me was . . . *or* Last message was . . . *(to be used in AFS as a procedure signal)*
LTA	Lower control area
LTD	Limited
LTP	Landing threshold point
LV	Light and variable *(relating to wind)*
LVE	Leave *or* leaving
LVL	Level
LVP	Low visibility procedures
LYR	Layer *or* layered

M

. . . M	Metres *(preceded by figures)*
M . . .	Mach number *(followed by figures)*
M . . .	Minimum value of runway visual range *(followed by figures in METAR/SPECI)*
MAA	Maximum authorized altitude
MAG	Magnetic
MAHF	Missed approach holding fix
MAINT	Maintenance
MAP	Aeronautical maps and charts
MAPT	Missed approach point
MAR	At sea
MAR	March
MATF	Missed approach turning fix
MATZ	Military aerodrome traffic zone
MAX	Maximum
MAY	May
MBST	Microburst
MCA	Minimum crossing altitude
MCTR	Military control zone
MCW	Modulated continuous wave
MDA	Minimum descent altitude
MDF	Medium frequency direction-finding station
MDH	Minimum descent height
MEA	Minimum en-route altitude
MEDEVAC	Medical evacuation flight
MEHT	Minimum eye height over threshold *(for visual approach slope indicator systems)*
MET†	Meteorological *or* meteorology
METAR†	Aerodrome routine meteorological report *(in meteorological code)*
MET REPORT	Local routine meteorological report *(in abbreviated plain language)*
MF	Medium frequency [300 to 3 000 kHz]
MHA	Minimum holding altitude
MHDF	Medium and high frequency direction-finding stations *(at the same location)*
MHVDF	Medium, high and very high frequency direction-finding stations *(at the same location)*
MHZ	Megahertz
MID	Mid-point *(related to RVR)*
MIFG	Shallow fog
MIL	Military
MIN*	Minutes
MIS	Missing . . . *(transmission identification)* *(to be used in AFS as a procedure signal)*
MKR	Marker radio beacon
MLS‡	Microwave landing system
MM	Middle marker
MNH	Middle latitudes northern hemisphere

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MNM	Minimum
MNPS	Minimum navigation performance specifications
MNT	Monitor *or* monitoring *or* monitored
MNTN	Maintain
MOA	Military operating area
MOC	Minimum obstacle clearance *(required)*
MOCA	Minimum obstacle clearance altitude
MOD	Moderate *(used to indicate the intensity of weather phenomena, interference or static reports, e.g. MODRA = moderate rain)*
MON	Above mountains
MON	Monday
MOPS†	Minimum operational performance standards
MOV	Move *or* moving *or* movement
MPS	Metres per second
MRA	Minimum reception altitude
MRG	Medium range
MRP	ATS/MET reporting point
MS	Minus
MSA	Minimum sector altitude
MSAS†	*(to be pronounced "EM-SAS")* Multi-functional transport satellite (MTSAT) satellite-based augmentation system
MSAW	Minimum safe altitude warning
MSG	Message
MSH	Middle latitudes southern hemisphere
MSL	Mean sea level
MSR#	Message . . . *(transmission identification)* has been misrouted *(to be used in AFS as a procedure signa*l)
MSSR	Monopulse secondary surveillance radar
MT	Mountain
MTOM	Maximum take-off mass
MTU	Metric units
MTW	Mountain waves
MVDF	Medium and very high frequency direction- finding stations *(at the same location)*
MWO	Meteorological watch office
MX	Mixed type of ice formation *(white and clear)*

N

N	No distinct tendency *(in RVR during previous 10 minutes)*
N	North *or* northern latitude
NADP	Noise abatement departure procedure
NASC†	National AIS system centre
NAT	North Atlantic
NAV	Navigation
NAVAID	Navigation aid
NB	Northbound
NBFR	Not before
NC	No change
NCD	No cloud detected *(used in automated METAR/SPECI)*
NDB‡	Non-directional radio beacon
NDV	No directional variations available *(used in automated METAR/SPECI)*
NE	North-east
NEB	North-eastbound
NEG	No *or* negative *or* permission not granted *or* that is not correct
NGT	Night
NIL*†	None *or* I have nothing to send to you
NM	Nautical miles
NML	Normal
NN	No name, unnamed
NNE	North-north-east
NNW	North-north-west
NO	No (negative) *(to be used in AFS as a procedure signal)*
NOF	International NOTAM office
NONSTD	Non-standard
NOSIG†	No significant change *(used in trend-type landing forecasts)*
NOTAM†	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
NOTAMC	Cancelling NOTAM
NOTAMN	New NOTAM

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SS	Sunset
SSB	Single sideband
SSE	South-south-east
SSR‡	Secondary surveillance radar
SST	Supersonic transport
SSW	South-south-west
ST	Stratus
STA	Straight-in approach
STAR†	Standard instrument arrival
STD	Standard
STF	Stratiform
STN	Station
STNR	Stationary
STOL	Short take-off and landing
STS	Status
STWL	Stopway light(s)
SUBJ	Subject to
SUN	Sunday
SUP	Supplement *(AIP Supplement)*
SUPPS	Regional supplementary procedures
SVC	Service *(message type only)*
SVCBL	Serviceable
SW	South-west
SWB	South-westbound
SWX	Space weather
SWXC	Space weather centre
SWY	Stopway

T

T	Temperature
. . . T	True *(preceded by a bearing to indicate reference to True North)*
TA	Traffic advisory
TA	Transition altitude
TAA	Terminal arrival altitude
TACAN†	UHF tactical air navigation aid
TAF†	Aerodrome forecast *(in meteorological code)*
TA/H	Turn at an altitude/height
TAIL†	Tail wind
TAR	Terminal area surveillance radar
TAS	True airspeed
TAX	Taxiing *or* taxi
TC	Tropical cyclone
TCAC	Tropical cyclone advisory centre
TCAS RA†	*(to be pronounced "TEE-CAS-AR-AY")* Traffic alert and collision avoidance system resolution advisory
TCH	Threshold crossing height
TCU	Towering cumulus
TDO	Tornado
TDZ	Touchdown zone
TECR	Technical reason
TEL	Telephone
TEMPO†	Temporary *or* temporarily
TF	Track to fix
TFC	Traffic
TGL	Touch-and-go landing
TGS	Taxiing guidance system
THR	Threshold
THRU	Through
THU	Thursday
TIBA†	Traffic information broadcast by aircraft
TIL†	Until
TIP. . .	Until past *(followed by place)*
TKOF	Take-off
TL . . .	Till *(followed by time by which weather change is forecast to end)*
TLOF	Touchdown and lift-off area
TMA‡	Terminal control area
TN . . .	Minimum temperature *(followed by figures in TAF)*
TNA	Turn altitude
TNH	Turn height
TO . . .	To *(followed by place)*
TOC	Top of climb
TODA	Take-off distance available
TODAH	Take-off distance available, helicopter
TOP†	Cloud top
TORA	Take-off run available
TOX	Toxic
TP	Turning point
TR	Track
TRA	Temporary reserved airspace
TRANS	Transmits *or* transmitter
TREND†	Trend forecast
TRG	Training
TRL	Transition level
TROP	Tropopause

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TS	Thunderstorm *(in aerodrome reports and forecasts, TS used alone means thunder heard but no precipitation at the aerodrome)*
TS . . .	Thunderstorm *(followed by RA = rain, SN = snow, PL = ice pellets, GR = hail, GS = small hail and/or snow pellets or combinations thereof, e.g. TSRASN = thunderstorm with rain and snow)*
TSUNAMI†	Tsunami *(used in aerodrome warnings)*
TT	Teletypewriter
TUE	Tuesday
TURB	Turbulence
T-VASIS†	(*to be pronounced "TEE-VASIS")* T visual approach slope indicator system
TVOR	Terminal VOR
TWR	Aerodrome control tower *or* aerodrome control
TWY	Taxiway
TX . . .	Maximum temperature *(followed by figures in TAF)*
TXL	Taxilane
TXT*	Text *(when the abbreviation is used to request a repetition, the question mark (IMI) precedes the abbreviation, e.g. IMI TXT) (to be used in AFS as a procedure signal)*
TYP	Type of aircraft
TYPH	Typhoon

U

U	Upward *(tendency in RVR during previous 10 minutes)*
UA	Unmanned aircraft
UAB	Until advised by . . .
UAC	Upper area control centre
UAR	Upper air route
UAS	Unmanned aircraft system
UDF	Ultra high frequency direction-finding station
UFN	Until further notice
UHDT	Unable higher due traffic
UHF‡	Ultra high frequency [300 to 3 000 MHz]
UIC	Upper information centre
UIR‡	Upper flight information region
ULM	Ultra light motorized aircraft
ULR	Ultra long range
UNA	Unable
UNAP	Unable to approve
UNL	Unlimited
UNREL	Unreliable
UP	Unidentified precipitation *(used in automated METAR/SPECI)*
U/S	Unserviceable
UTA	Upper control area
UTC‡	Coordinated Universal Time

V

. . . V . . .	Variations from the mean wind direction *(preceded and followed by figures in METAR/SPECI, e.g. 350V070)*
VA	Heading to an altitude
VA	Volcanic ash
VAAC	Volcanic ash advisory centre
VAC . . .	Visual approach chart *(followed by name/title)*
VAL	In valleys
VAN	Runway control van
VAR	Magnetic variation
VAR	Visual-aural radio range
VASIS	Visual approach slope indicator systems
VC . . .	Vicinity of the aerodrome *(followed by FG = fog, FC = funnel cloud, SH = shower, PO = dust/sand whirls, BLDU = blowing dust, BLSA = blowing sand, BLSN = blowing snow, DS = duststorm, SS = sandstorm, TS = thunderstorm or VA = volcanic ash, e.g. VCFG = vicinity fog)*
VCY	Vicinity
VDF	Very high frequency direction-finding station
VER	Vertical
VFR‡	Visual flight rules
VHF‡	Very high frequency [30 to 300 MHz]
VI	Heading to an intercept
VIP‡	Very important person

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Descend to and maintain	DTAM
Destination	DEST
Deteriorate *or* deteriorating	DTRT
Deviation *or* deviating	DEV
Dew point temperature	DP
Diffuse	DIF
Digital flight data recorder	DFDR
Direct *(in relation to flight plan clearances and type of approach)*	DCT
Direct controller-pilot communications	DCPC
Direction finding	DF
Displaced runway threshold	DTHR
Distance	DIST
Distance from touchdown indicator	DFTI
Distance measuring equipment	DME‡
Distress phase	DETRESFA†
Divert *or* diverting	DIV
Docking	DCKG
Domestic	DOM
Doppler VOR	DVOR
Double channel duplex	DCD
Double channel simplex	DCS
Double sideband	DSB
Downward *(tendency in RVR during previous 10 minutes)*	D
Do you intend to ask me for a series of bearings? *or* I intend to ask you for a series of bearings *(to be used in radiotelegraphy as a Q Code)*	QDL
Drizzle	DZ
Dual tandem wheels	DTW
Dual wheels	DW
Duration	DUR
During	DRG
Dust	DU
Dust/sand whirls *(dust devils)*	PO
Duststorm	DS

E

East *or* eastern longitude	E
Eastbound	EB
East-north-east	ENE
East-south-east	ESE
Effective from *or* with effect from	WEF
Effective immediately *or* with immediate effect	WIE
Electronic flight instrument system *(to be pronounced "EE-FIS")*	EFIS†
Elevation	ELEV
Elevation differential area	EDA
Embedded in a layer *(to indicate cumulonimbus embedded in layers of other clouds)*	EMBD
Emergency	EMERG
Emergency location beacon — aircraft	ELBA†
Emergency locator transmitter	ELT
Emission	EM
Engine	ENG
Enhanced vision system	EVS
En route	ENR
Enroute chart *(followed by name/title)*	ENRC . . .
En-route surveillance radar	RSR
Equatorial latitudes northern hemisphere	EQN
Equatorial latitudes southern hemisphere	EQS
Equipment	EQPT
Error *(to be used in AFS as a procedure signal)*	EEE#
Estimate *or* estimated *or* estimation *(message type designator)*	EST
Estimated elapsed time	EET
Estimated off-block time	EOBT
Estimated time of arrival *or* estimating arrival	ETA*‡
Estimated time of departure *or* estimating departure	ETD‡
Estimated time over significant point	ETO
European geostationary navigation overlay service *(to be pronounced "EGG-NOS")*	EGNOS†
European regional OPMET data exchange	EUR RODEX
Every	EV
Except	EXC
Exercises *or* exercising *or* to exercise	EXER
Expect *or* expected *or* expecting	EXP
Expect further clearance	EFC
Expected approach time	EAT
Extend *or* extending *or* extended	EXTD
Extended diversion time operations	EDTO
Extra long range	ELR

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Extremely high frequency [30 000 to 300 000 MHz]	EHF

F

Facilitation of international air transport	FAL
Facilities	FAC
Facsimile transmission	FAX
February	FEB
Feet *(dimensional unit)*	FT
Feet per minute	FPM
Few	FEW
Fictitious threshold point	FTP
Field	FLD
Final approach	FNA
Final approach and take-off area	FATO
Final approach fix	FAF
Final approach point	FAP
Final approach segment	FAS
Firing	FRNG
First	FST
Fixed	F
Flares	FLR
Flashing	FLG
Flight	FLT
Flight check	FLTCK
Flight data processing system	FDPS
Flight information centre	FIC
Flight information region	FIR‡
Flight information service	FIS
Flight level	FL
Flight management computer	FMC
Flight management system	FMS‡
Flight path alignment point	FPAP
Flight plan	FPL
Flight plan cancellation *(message type designator)*	CNL
Flight plan filed in the air	AFIL
Flight plan route	FPR
Flight service station	FSS
Flight technical error	FTE
Flight technical tolerance	FTT
Flow management unit	FMU
Fluctuating *or* fluctuation *or* fluctuated	FLUC
Fly *or* flying	FLY
Fog	FG
Fog patches	BCFG
Follow(s) *or* following	FLW
Forecast	FCST
Freezing	FZ
Freezing drizzle	FZDZ
Freezing fog	FZFG
Freezing rain	FZRA
Frequency	FREQ
Frequent	FRQ
Friction coefficient	FCT
Friday	FRI
From	FM
From *(followed by time at which weather change is forecast to begin)*	FM . . .
From *(used to precede the call sign of the calling station) (to be used in AFS as a procedure signal)*	DE*
Front *(relating to weather)*	FRONT†
Frost *(used in aerodrome warnings)*	FROST†
Fuel remaining	FR
Full stop landing	FSL
Funnel cloud *(tornado or waterspout)*	FC

G

GBAS azimuth reference point	GARP
GBAS landing system	GLS‡
General	GEN
General aviation	GA
Geographic *or* true	GEO
Geoid undulation	GUND
Glide path	GP
Glide path angle	GPA
Glide path intercept point	GPIP
Glider	GLD
Global navigation satellite system	GNSS‡
Global navigation satellite system *(to be pronounced "GLO-NAS")*	GLONASS†
Global positioning system	GPS‡
Go ahead, resume sending *(to be used in AFS as a procedure signal)*	GA
Government	GOV
GPS and geostationary earth orbit augmented navigation	GAGAN†

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Grass landing area	GRASS
Gravel	GRVL
Green	G
Ground	GND
Ground-based augmentation system *(to be pronounced "GEE-BAS")*	GBAS†
Ground-based regional augmentation system *(to be pronounced "GRASS")*	GRAS†
Ground check	GNDCK
Ground controlled approach system *or* ground controlled approach	GCA‡
Ground earth station	GES
Ground movement chart *(followed by name/title)*	GMC . . .
Ground power unit	GPU
Ground proximity warning system	GPWS‡
Ground speed	GS
Ground-to-air	G/A
Ground-to-air and air-to-ground	G/A/G

H

Hail	GR
Hazard beacon	HBN
Haze	HZ
Heading	HDG
Heading to a manual termination	VM
Heading to an altitude	VA
Heading to an intercept	VI
Head-up display	HUD
Heavy	HVY
Heavy *(used to indicate the intensity of weather phenomena, e.g. heavy rain = HVY RA)*	HVY
Hectopascal	HPA
Height *or* height above	HGT
Helicopter	HEL
Helicopter approach path indicator	HAPI
Helicopter landing site	HLS
Heliport	HLP
Heliport crossing height	HCH
Heliport reference point	HRP
Hertz *(cycle per second)*	HZ
High and very high frequency direction-finding stations *(at the same location)*	HVDF
High frequency [3 000 to 30 000 kHz]	HF‡
High frequency direction-finding station	HDF
High latitudes northern hemisphere	HNH
High latitudes southern hemisphere	HSH
High pressure area *or* the centre of high pressure	H
Higher	HYR
Holding	HLDG
Holding/racetrack to a fix	HF
Holding/racetrack to a manual termination	HM
Holding/racetrack to an altitude	HA
Holiday	HOL
Hospital aircraft	HOSP
Hours	HR
Humanitarian	HUM
Hurricane	HURCN

I

I have nothing to send to you *or* none	NIL*†
Ice on runway	IR
Ice pellets	PL
Icing	ICE
Identification	IDENT†
Identification beacon	IBN
Identification friend/foe	IFF
Identifier *or* identify	ID
If not possible	INP
Immediate *or* immediately	IMT
Immigration	IMG
Improve *or* improving	IMPR
In and out of clouds	IAO
In cloud	INC
Inbound	INBD
Incorporated	INCORP
Independent sideband	ISB
Indicated airspeed	IAS
Inertial navigation system	INS
Inertial reference system	IRS
Information	INFO†
Information concerning en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations	SIGMET†

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Information concerning en-route weather phenomena which may affect the safety of low-level aircraft operations	AIRMET†
Initial approach	INA
Initial approach fix	IAF
Inland	LAN
Inner marker	IM
Inoperative	INOP
In progress	INPR
Install *or* installed *or* installation	INSTL
Instrument	INSTR
Instrument approach chart *(followed by name/title)*	IAC . . .
Instrument approach procedure	IAP
Instrument flight rules	IFR‡
Instrument landing system	ILS‡
Instrument meteorological conditions	IMC‡
Intensify *or* intensifying	INTSF
Intensity	INTST
Intermediate approach fix	IF
International	INTL
International Civil Aviation Organization	ICAO
International general aviation	IGA
International NOTAM office	NOF
International standard atmosphere	ISA
International system of units	SI
Interrogation sign (question mark) *(to be used in AFS as a procedure signal)*	IMI*
Interrogator	INTRG
Interrupt *or* interruption *or* interrupted	INTRP
Intersection	INT
Intersection of air routes	IAR
In valleys	VAL
Isolated	ISOL

J

January	JAN
Jet stream	JTST
July	JUL
June	JUN

K

Kilograms	KG
Kilohertz	KHZ
Kilometres	KM
Kilometres per hour	KMH
Kilopascal	KPA
Kilowatts	KW
Knots	KT
Knots indicated airspeed	KIAS

L

Landing	LDG
Landing direction indicator	LDI
Landing distance available	LDA
Landing distance available, helicopter	LDAH
Landing threshold point	LTP
Last message received by me was . . . *(to be used in AFS as a procedure signal)*	LR
Last message sent by me was . . . *or* Last message was . . . *(to be used in AFS as a procedure signal)*	LS
Lateral navigation *(to be pronounced "EL-NAV")*	LNAV†
Latitude	LAT
Layer *or* layered	LYR
Leave *or* leaving	LVE
Left *(preceded by runway designation number to identify a parallel runway)*	. . . L
Length	LEN
Level	LVL
Light *(used to indicate the intensity of weather phenomena, interference or static reports, e.g. light rain = FBL RA)*	FBL
Light *or* lighting	LGT
Light and variable *(relating to wind)*	LV
Light intensity high	LIH
Light intensity low	LIL
Light intensity medium	LIM
Lighted	LGTD
Limited	LTD
Line *(used in SIGMET)*	LINE

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Litre	L
Local *or* locally *or* location *or* located	LCA
Local mean time	LMT
Local routine meteorological report *(in abbreviated plain language)*	MET REPORT
Local special meteorological report *(in abbreviated plain language)*	SPECIAL†
Localizer	LOC
Localizer performance with vertical guidance	LPV
Locator	L
Locator, middle	LM
Locator, outer	LO
Logical acknowledgement *(message type designator)*	LAM
Long *(used to indicate the type of approach desired or required)*	LNG
Longitude	LONG
Long range	LRG
LORAN *(long range air navigation system)*	LORAN†
Low drifting *(followed by DU = dust, SA = sand or SN = snow)*	DR . . .
Low frequency [30 to 300 kHz]	LF
Low pressure area *or* the centre of low pressure	L
Low visibility procedures	LVP
Lower control area	LTA

M

Mach number *(followed by figures)*	M . . .
Magnetic	MAG
Magnetic bearing	QDR
Magnetic heading *(zero wind)*	QDM‡
Magnetic orientation of runway	QFU
Magnetic variation	VAR
Maintain	MNTN
Maintenance	MAINT
March	MAR
Marker radio beacon	MKR
Maximum	MAX
Maximum authorized altitude	MAA
Maximum take-off mass	MTOM
Maximum temperature *(followed by figures in TAF)*	TX . . .
Maximum value of wind speed or runway visual range *(followed by figures in METAR/SPECI and TAF)*	P . . .
May	MAY
Mean sea level	MSL
Medical evacuation flight	MEDEVAC
Medium and high frequency direction-finding stations *(at the same location)*	MHDF
Medium and very high frequency direction-finding stations *(at the same location)*	MVDF
Medium frequency [300 to 3 000 kHz]	MF
Medium frequency direction-finding station	MDF
Medium, high and very high frequency direction-finding stations *(at the same location)*	MHVDF
Medium range	MRG
Megahertz	MHZ
Message	MSG
Message . . . *(transmission identification)* has been misrouted *(to be used in AFS as a procedure signal)*	MSR#
Meteorological *or* meteorology	MET†
Meteorological information for aircraft in flight	VOLMET†
Meteorological watch office	MWO
Metres *(preceded by figures)*	. . . M
Metres per second	MPS
Metric units	MTU
Microburst	MBST
Microwave landing system	MLS‡
Middle latitudes northern hemisphere	MNH
Middle latitudes southern hemisphere	MSH
Middle marker	MM
Mid-point *(related to RVR)*	MID
Military	MIL
Military aerodrome traffic zone	MATZ
Military control zone	MCTR
Military operating area	MOA
Minimum	MNM
Minimum crossing altitude	MCA
Minimum descent altitude	MDA
Minimum descent height	MDH

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Minimum en-route altitude	MEA
Minimum eye height over threshold *(for visual approach slope indicator systems)*	MEHT
Minimum holding altitude	MHA
Minimum navigation performance specifications	MNPS
Minimum obstacle clearance *(required)*	MOC
Minimum obstacle clearance altitude	MOCA
Minimum operational performance standards	MOPS†
Minimum reception altitude	MRA
Minimum safe altitude warning	MSAW
Minimum sector altitude	MSA
Minimum temperature *(followed by figures in TAF)*	TN . . .
Minimum value of runway visual range *(followed by figures in METAR/SPECI)*	M . . .
Minus	MS
Minutes	MIN*
Missed approach holding fix	MAHF
Missed approach point	MAPT
Missed approach turning fix	MATF
Missing . . . (*transmission identification) (to be used in AFS as a procedure signal)*	MIS
Mist	BR
Mixed type of ice formation *(white and clear)*	MX
Moderate *(used to indicate the intensity of weather phenomena, interference or static reports, e.g. moderate rain = MODRA)*	MOD
Modification *(message type designator)*	CHG
Modulated continuous wave	MCW
Monday	MON
Monitor *or* monitoring *or* monitored	MNT
Monopulse secondary surveillance radar	MSSR
Mountain	MT
Mountain waves	MTW
Move *or* moving *or* movement	MOV
Multi-functional transport satellite (MTSAT) satellite-based augmentation system *(to be pronounced "EM-SAS")*	MSAS†

N

National	NTL
National AIS system centre	NASC†
Nautical miles	NM
Navigation	NAV
Navigation aid	NAVAID
Navigation system error	NSE
New NOTAM	NOTAMN
Next	NXT
Night	NGT
Nil significant cloud	NSC
Nil significant weather	NSW
Nimbostratus	NS
No *or* negative *or* permission not granted *or* that is not correct	NEG
No change	NC
No cloud detected *(used in automated METAR/SPECI)*	NCD
No directional variations available *(used in automated METAR/SPECI)*	NDV
No distinct tendency *(in RVR during previous 10 minutes)*	N
No name, unnamed	NN
No (negative) *(to be used in AFS as a procedure signal)*	NO
No reply heard	NRH
No significant change *(used in trend-type landing forecasts)*	NOSIG†
No specific working hours	HX
No transgression zone	NTZ‡
Noise abatement departure procedure	NADP
Non-directional radio beacon	NDB‡
Non-precision approach	NPA
Non-standard	NONSTD
None *or* I have nothing to send to you	NIL*†
Normal	NML
Normal operating zone	NOZ‡
North *or* northern latitude	N
North Atlantic	NAT
Northbound	NB
North-east	NE
North-eastbound	NEB
North-north-east	NNE
North-north-west	NNW
North-west	NW

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North-westbound	NWB
Not before	NBFR
Notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations	NOTAM†
November	NOV
Number	NR

O

Obscure *or* obscured *or* obscuring	OBSC
Observe *or* observed *or* observation	OBS
Obstacle	OBST
Obstacle assessment surface	OAS
Obstacle clearance altitude	OCA
Obstacle clearance height	OCH
Obstacle clearance surface	OCS
Obstacle free zone	OFZ
Obstacle identification surface	OIS
Occasional *or* occasionally	OCNL
Occulting *(light)*	OCC
Ocean station vessel	OSV
Oceanic area control centre	OAC
Oceanic control area	OCA
October	OCT
On-line data interchange	OLDI†
On request	O/R
On top	OTP
Opaque, white type of ice formation	OPA
Open *or* opening *or* opened	OPN
Operations	OPS†
Operator *or* operate *or* operative *or* operating *or* operational	OPR
Operational control is the control indicated	OPC
Operational meteorological *(information)*	OPMET†
Order	ORD
Organized track system	OTS
Originate *(to be used in AFS as a procedure signal)*	OGN
Outbound	OUBD
Outer marker	OM
Overcast	OVC
Overhead	OHD

P

Parachute jumping exercise	PJE
Parallel	PARL
Parking	PRKG
Passenger(s)	PAX
Passing	PSG
Pavement classification number	PCN
Per cent	PCT
Performance	PER
Performance-based communication	PBC
Performance-based navigation	PBN
Performance-based surveillance	PBS
Permanent	PERM
Persons on board	POB
Pierced steel plank	PSP
Pilot-controlled lighting	PCL
Plan position indicator	PPI
Plus	PS
Point-in-space reference point	PRP
Point of no return	PNR
Polar track structure	PTS
Position	PSN
Possible	POSS
Power	PWR
Practice low approach	PLA
Precision approach	PA
Precision approach lighting system *(specify category)*	PALS
Precision approach path indicator	PAPI†
Precision approach radar	PAR‡
Precision approach terrain chart *(followed by name/title)*	PATC . . .
Pre-departure clearance	PDC‡
Pre-flight information bulletin	PIB
Present level	PLVL
Present position	PPSN
Pressure system(s)	PSYS

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Primary	PRI
Primary surveillance radar	PSR‡
Prior notice required	PN
Prior permission required	PPR
Probability	PROB†
Procedure	PROC
Procedure design gradient	PDG
Procedure turn	PTN
Procedures for air navigation services	PANS
Proceed *or* proceeding	PCD
Processed meteorological data in the form of grid point values expressed in binary form *(in meteorological code)*	GRIB
Prohibited area *(followed by identification)*	P . . .
Propeller	PROP
Provisional	PROV

Q

Quadrant	QUAD

R

Radar position indicator	RPI‡
Radar position symbol	RPS
Radar vectoring area	RVA
Radial	RDL
Radial from VOR *(followed by three figures)*	R . . .
Radio	RDO
Radio range	RNG
Radioactive	RDOACT
Radiocommunication failure *(message type designator)*	RCF
Radiotelegraph	RTG
Radiotelephone	RTF
Radioteletypewriter	RTT
Ragged	RAG
Rain	RA
Range *(lights)*	RG
Rate of climb	ROC
Rate of descent	ROD
Rate of turn	R
Reach *or* reaching	RCH
Reach cruising altitude	RCA
Receive *or* receiver	REC
Received *(acknowledgement of receipt) (to be used in AFS as a procedure signal)*	R*
Receiver autonomous integrity monitoring	RAIM†
Receiving only	RON
Recent *(used to qualify weather phenomena, e.g. recent rain = RERA)*	RE
Reclearance in flight	RIF
Recleared	RCLR
Red	R
Reduced vertical separation minimum [300 m (1 000 ft) between FL 290 and FL 410]	RVSM‡
Reference datum height	RDH
Reference path data selector	RPDS
Reference to . . . *or* refer to . . .	REF
Regional AIS system centre	RASC†
Regional OPMET bulletin exchange *(scheme)*	ROBEX†
Regional supplementary procedures	SUPPS
Registration	REG
Rejected take-off distance available, helicopter	RTODAH
Relay to	RLA
Remark	RMK
Remote altimeter setting source	RASS
Repeat *or* I repeat *(to be used in AFS as a procedure signal)*	RPT*
Repetitive flight plan	RPL
Replace *or* replaced	RPLC
Replacing NOTAM	NOTAMR
Report *or* reporting *or* reporting point	REP
Report leaving	RL
Report reaching	RR
Request *or* requested	REQ
Request *(to be used in AFS as a procedure signal)*	RQ*
Request flight plan *(message type designator)*	RQP
Request level change en route	RLCE
Request supplementary flight plan *(message type designator)*	RQS

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Requested level not available	RLNA
Required communication performance	RCP‡
Required navigation performance	RNP‡
Required surveillance performance	RSP‡
Requirements	RQMNTS
Re-route	RERTE
Rescue and fire fighting services	RFFS
Rescue boat	RB
Rescue coordination centre	RCC
Rescue sub-centre	RSC
Rescue vessel	RV
Resolution advisory	RA
Responder beacon	RSP
Restricted area *(followed by identification)*	R . . .
Return *or* returned *or* returning	RTN
Return to service	RTS
Right *(preceded by runway designation number to identify a parallel runway)*	. . . R
Right-hand circuit	RHC
Rime *(used in aerodrome warnings)*	RIME†
Root sum square	RSS
Route	RTE
Rules of the air and air traffic services	RAC
Runway	RWY
Runway *(followed by figures in METAR/SPECI)*	R . . .
Runway alignment indicator	RAI
Runway arresting gear	RAG
Runway centre line	RCL
Runway centre line light(s)	RCLL
Runway(s) cleared *(used in METAR/SPECI)*	CLRD
Runway control van	VAN
Runway edge light(s)	REDL
Runway end light(s)	RENL
Runway end safety area	RESA
Runway lead-in lighting system	RLLS
Runway surface condition	RSCD
Runway threshold light(s)	RTHL
Runway touchdown zone light(s)	RTZL
Runway visual range	RVR‡

S

Sand	SA
Sandstorm	SS
Sanitary	SAN
SAR point of contact	SPOC
Satellite-based augmentation system *(to be pronounced "ESS-BAS")*	SBAS†
Satellite communication *(used only when referring generally to both voice and data satellite communication or only data satellite communication)*	SATCOM†
Satellite voice communication	SATVOICE†
Saturday	SAT
Scattered	SCT
Schedule *or* scheduled	SKED
Sea *(used in connection with sea-surface temperature and state of sea)*	SEA
Sea-surface temperature *(followed by figures in METAR/SPECI)*	W . . .
Search and rescue	SAR
Search and rescue region	SRR
Secondary	SRY
Secondary surveillance radar	SSR‡
Seconds	SEC
Section	SECN
Sector	SECT
Selective calling system	SELCAL†
Selective identification feature	SIF
September	SEP
Service *or* servicing *or* served	SER
Service available during hours of scheduled operation	HS
Service available to meet operational requirements	HO
Service *(message type only)*	SVC
Serviceable	SVCBL
Severe *(used to qualify icing and turbulence reports)*	SEV
Shall I cancel telegram number . . .? *or* Cancel telegram number . . . *(to be used in AFS as a Q Code)*	QTA
Shall I run my test tape/a test sentence? *or* Run your test tape/a test sentence *(to be used in AFS as a Q Code)*	QJH
Shallow fog	MIFG

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Short *(used to indicate the type of approach desired or required)*	BRF
Short range	SRG
Short take-off and landing	STOL
Shower *(followed by RA = rain, SN = snow, PL = ice pellets, GR = hail, GS = small hail and/or snow pellets or combinations thereof, e.g. showers of rain and snow = SHRASN)*	SH . . .
Signal	SGL
Significant	SIG
Significant wave height *(followed by figures in METAR/SPECI)*	H . . .
Simple approach lighting system	SALS
Simultaneous *or* simultaneously	SIMUL
Single isolated wheel load	SIWL
Single sideband	SSB
Slow	SLW
Small hail and/or snow pellets	GS
Smoke	FU
Snow	SN
Snow grains	SG
South *or* southern latitude	S
Southbound	SB
South-east	SE
South-eastbound	SEB
South-south-east	SSE
South-south-west	SSW
South-west	SW
South-westbound	SWB
Space weather	SWX
Space weather centre	SWXC
Special air-report *(message type designator)*	ARS
Special position indicator	SPI
Special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations	ASHTAM
Special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format	SNOWTAM†
Speed limiting point	SLP
Spot wind	SPOT†
Squall	SQ
Squall line	SQL
Stand by	SDBY
Standard	STD
Standard deviation	SD
Standard instrument arrival	STAR†
Standard instrument departure	SID†
Standard regional route transmitting frequencies	RUT
Standards and Recommended Practices [ICAO]	SARPS
Start of climb	SOC
State of the sea *(followed by figures in METAR/SPECI)*	S . . .
Station	STN
Stationary	STNR
Status	STS
Step down fix	SDF
Stop-end *(related to RVR)*	END
Stopway	SWY
Stopway light(s)	STWL
Straight-in approach	STA
Stratiform	STF
Stratocumulus	SC
Stratus	ST
Subject to	SUBJ
Sunday	SUN
Sunrise	SR
Sunrise to sunset	HJ
Sunset	SS
Sunset to sunrise	HN
Super high frequency [3 000 to 30 000 MHz]	SHF
Supersonic transport	SST
Supplement *(AIP Supplement)*	SUP
Supplementary flight plan *(message type designator)*	SPL
Surface	SFC

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Surface movement control	SMC
Surface movement radar	SMR
Surveillance radar approach	SRA
Surveillance radar element of precision approach radar system	SRE

T

Tail wind	TAIL†
Take-off	TKOF
Take-off distance available	TODA
Take-off distance available, helicopter	TODAH
Take-off run available	TORA
Taxiing *or* taxi	TAX
Taxiing guidance system	TGS
Taxilane	TXL
Taxiway	TWY
Technical reason	TECR
Telephone	TEL
Teletypewriter	TT
Temperature	T
Temporary *or* temporarily	TEMPO†
Temporary reserved airspace	TRA
Terminal area surveillance radar	TAR
Terminal arrival altitude	TAA
Terminal control area	TMA‡
Terminal VOR	TVOR
Text *(when the abbreviation is used to request a repetition, the question mark (IMI) precedes the abbreviation, e.g. IMI TXT) (to be used in AFS as a procedure signal)*	TXT*
This is a channel-continuity-check of transmission to permit comparison of your record of channel-sequence numbers of messages received on the channel *(to be used in AFS as a procedure signal)*	CH#
This is a duplicate message *(to be used in AFS as a procedure signal)*	DUPE#
Threshold	THR
Threshold crossing height	TCH
Through	THRU
Thunderstorm *(in aerodrome reports and forecasts, TS used alone means thunder heard but no precipitation at the aerodrome)*	TS
Thunderstorm *(followed by RA = rain, SN = snow, PL = ice pellets, GR = hail, GS = small hail and/or snow pellets or combinations thereof, e.g. thunderstorm with rain and snow = TSRASN)*	TS . . .
Thursday	THU
Till *(followed by time by which weather change is forecast to end)*	TL . . .
To *(followed by place)*	TO . . .
Top of climb	TOC
Tornado	TDO
Touch-and-go landing	TGL
Touchdown and lift-off area	TLOF
Touchdown zone	TDZ
Towering cumulus	TCU
Toxic	TOX
Track	TR
Track to fix	TF
Traffic	TFC
Traffic advisory	TA
Traffic alert and collision avoidance system resolution advisory *(to be pronounced "TEE-CAS-AR-AY")*	TCAS RA†
Traffic information broadcast by aircraft	TIBA†
Training	TRG
Transition altitude	TA
Transition level	TRL
Transmits *or* transmitter	TRANS
Trend forecast	TREND†
Tropical cyclone	TC
Tropical cyclone advisory centre	TCAC
Tropopause	TROP
True *(preceded by a bearing to indicate reference to True North)*	. . . T
True airspeed	TAS
True bearing	QTE
Tsunami *(used in aerodrome warnings)*	TSUNAMI†
Tuesday	TUE
Turbulence	TURB
Turn altitude	TNA
Turn at an altitude/height	TA/H

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Turn height	TNH
Turning point	TP
T visual approach slope indicator system *(to be pronounced "TEE-VASIS")*	T-VASIS†
Type of aircraft	TYP
Typhoon	TYPH

U

UHF tactical air navigation aid	TACAN†
Ultra high frequency [300 to 3 000 MHz]	UHF‡
Ultra high frequency direction-finding station	UDF
Ultra light motorized aircraft	ULM
Ultra long range	ULR
Unable	UNA
Unable higher due traffic	UHDT
Unable to approve	UNAP
Uncertainty phase	INCERFA†
Unidentified precipitation *(used in automated METAR/SPECI)*	UP
Unlimited	UNL
Unmanned aircraft	UA
Unmanned aircraft system	UAS
Unreliable	UNREL
Unserviceable	U/S
Until	TIL†
Until advised by . . .	UAB . . .
Until further notice	UFN
Until past *(followed by place)*	TIP. . .
Upper air route	UAR
Upper area control centre	UAC
Upper control area	UTA
Upper flight information region	UIR‡
Upper information centre	UIC
Upward *(tendency in RVR during previous 10 minutes)*	U

V

Variable	VRB
Variations from the mean wind direction *(preceded and followed by figures in METAR/SPECI, e.g. 350V070)*	. . . V . . .
Variations from the mean wind speed (gusts) *(followed by figures in METAR/SPECI and TAF)*	G . . .
Vector to final	VTF
Vertical	VER
Vertical navigation *(to be pronounced "VEE-NAV")*	VNAV†
Vertical path angle	VPA
Vertical speed	VSP
Vertical take-off and landing	VTOL
Vertical visibility *(followed by figures in METAR/SPECI and TAF)*	VV . . .
Very high frequency [30 to 300 MHz]	VHF‡
Very high frequency direction-finding station	VDF
Very important person	VIP‡
Very long range	VLR
Very low frequency [3 to 30 kHz]	VLF
VHF omnidirectional radio range	VOR‡
Vicinity	VCY
Vicinity of the aerodrome *(followed by FG = fog, FC = funnel cloud, SH = shower, PO = dust/sand whirls, BLDU = blowing dust, BLSA = blowing sand, BLSN = blowing snow, DS = duststorm, SS = sandstorm, TS = thunderstorm or VA = volcanic ash, e.g. vicinity fog = VCFG)*	VC . . .
Visibility	VIS
Visibility, cloud and present weather better than prescribed values *or* conditions *(to be pronounced "KAV-OH-KAY")*	CAVOK†
Visual approach chart *(followed by name/title)*	VAC . . .
Visual approach slope indicator systems	VASIS
Visual-aural radio range	VAR
Visual flight rules	VFR‡
Visual manoeuvre with prescribed track	VPT
Visual meteorological conditions	VMC‡
Visual reference to the ground, by	VSA
Volcanic ash	VA
Volcanic ash advisory centre	VAAC
Volume *(followed by I, II . . .)*	VOL . . .
VOR airborne equipment test facility	VOT
VOR and TACAN combination	VORTAC†

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W

Warning	WRNG
Waterspout	WTSPT
Way-point	WPT
We agree *or* It is correct *(to be used in AFS as a procedure signal)*	OK*
Weaken *or* weakening	WKN
Weather	WX
Weather radar	WXR
Wednesday	WED
Weight	WT
West *or* western longitude	W
Westbound	WB
West-north-west	WNW
West-south-west	WSW
What is my distance to your station? *or* Your distance to my station is *(distance figures and units) (to be used in radiotelegraphy as a Q Code)*	QGE
White	W
White type of ice formation, opaque	OPA
Wide area augmentation system	WAAS†
Widespread	WDSPR
Width *or* wide	WID
Will comply	WILCO†
Will you give me the position of my station according to the bearings taken by the D/F stations which you control? *or* The position of your station according to the bearings taken by the D/F stations that I control was . . . latitude . . . longitude *(or other indication of position)*, class . . . at . . . hours *(to be used in radiotelegraphy as a Q Code)*	QTF
Will you indicate the TRUE track to reach you? *or* The TRUE track to reach me is . . . degrees at . . . hours *(to be used in radiotelegraphy as a Q Code)*	QUJ
Will you relay to . . . free of charge? *or* I will relay to . . . free of charge *(to be used in AFS as a Q Code)*	QSP
Wind	WIND
Wind direction indicator	WDI
Wind shear	WS
Wind speed	WSPD
Wing bar lights	WBAR
With effect from *or* effective from	WEF
With immediate effect *or* effective immediately	WIE
Within	WI
Without	WO
Work in progress	WIP
World Aeronautical Chart — ICAO 1:1 000 000 *(followed by name/title)*	WAC . . .
World area forecast centre	WAFC
World Geodetic System — 1984	WGS-84
Worldwide web	WWW

Y

Yellow	Y
Yellow caution zone *(runway lighting)*	YCZ
Yes *or* affirm *or* affirmative *or* that is correct	AFM
Yes (affirmative) *(to be used in AFS as a procedure signal)*	YES*
Your	YR

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ABBREVIATIONS AND TERMS TO BE TRANSMITTED AS SPOKEN WORDS WHEN USED IN RADIOTELEPHONY

DECODE

ACARS	*(to be pronounced "AY-CARS")* Aircraft communication addressing and reporting system
ACAS	*(to be pronounced "AY-CAS")* Airborne collision avoidance system
ADIZ	*(to be pronounced "AY-DIZ")* Air defence identification zone
AIREP	Air-report
AIRMET	Information concerning en-route weather phenomena which may affect the safety of low-level aircraft operations
ALERFA	Alert phase
APAPI	*(to be pronounced "AY-PAPI")* Abbreviated precision approach path indicator
ATIS	*(to be pronounced "AY-TIS")* Automatic terminal information service
AT-VASIS	*(to be pronounced "AY-TEE-VASIS")* Abbreviated T visual approach slope indicator system
AVGAS	Aviation gasoline
BARO-VNAV	*(to be pronounced "BAA-RO-VEE-NAV")* Barometric vertical navigation
BASE	Cloud base
CAVOK	*(to be pronounced "KAV-OH-KAY")* Visibility, cloud and present weather better than prescribed values or conditions
CIDIN	Common ICAO data interchange network
D-ATIS	*(to be pronounced "DEE-ATIS")* Data link automatic terminal information service
DETRESFA	Distress phase
EFIS	*(to be pronounced "EE-FIS")* Electronic flight instrument system
EGNOS	*(to be pronounced "EGG-NOS")* European geostationary navigation overlay service
ELBA	Emergency location beacon — aircraft
FRONT	Front *(relating to weather)*
FROST	Frost *(used in aerodrome warnings)*
GAGAN	GPS and geostationary earth orbit augmented navigation
GBAS	*(to be pronounced "GEE-BAS")* Ground-based augmentation system
GLONASS	*(to be pronounced "GLO-NAS")* Global navigation satellite system
GRAS	*(to be pronounced "GRASS")* Ground-based regional augmentation system
IDENT	Identification
INCERFA	Uncertainty phase
INFO	Information
LNAV	*(to be pronounced "EL-NAV")* Lateral navigation
LORAN	LORAN *(long range air navigation system)*
MET	Meteorological *or* meteorology
METAR	Aerodrome routine meteorological report *(in meteorological code)*
MOPS	Minimum operational performance standards
MSAS	*(to be pronounced "EM-SAS")* Multi-functional transport satellite (MTSAT) satellite-based augmentation system
NASC	National AIS system centre
NIL	None *or* I have nothing to send you
NOSIG	No significant change *(used in trend-type landing forecasts)*
NOTAM	Notice distributed by means of telecommunication containing information concerning the establishment, conditions or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations

OLDI	On-line data interchange
OPMET	Operational meteorological *(information)*
OPS	Operations
PAPI	Precision approach path indicator
PROB	Probability
RAIM	Receiver autonomous integrity monitoring
RASC	Regional AIS system centre
RIME	Rime *(used in aerodrome warnings)*
RNAV	*(to be pronounced "AR-NAV")* Area navigation
ROBEX	Regional OPMET bulletin exchange *(scheme)*
SATCOM	Satellite communication *(used only when referring generally to both voice and data satellite communication or only data satellite communication)*
SATVOICE	Satellite voice communication
SBAS	*(to be prounounced "ESS-BAS")* Satellite-based augmentation system
SELCAL	Selective calling system
SID	Standard instrument departure
SIGMET	Information concerning en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations
SNOWTAM	Special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format
SPECI	Aerodrome special meteorological report *(in meteorological code)*
SPECIAL	Local special meteorological report *(in abbreviated plain language)*
SPOT	Spot wind
STAR	Standard instrument arrival
TACAN	UHF tactical air navigation aid
TAF	Aerodrome forecast *(in meteorological code)*
TAIL	Tail wind
TCAS RA	*(to be pronounced "TEE-CAS-AR-AY")* Traffic alert and collision avoidance system resolution advisory
TEMPO	Temporary *or* temporarily
TIBA	Traffic information broadcast by aircraft
TIL	Until
TOP	Cloud top
TREND	Trend forecast
TSUNAMI	Tsunami *(used in aerodrome warnings)*
T-VASIS	*(to be pronounced "TEE–VASIS")* T visual approach slope indicator system
VNAV	*(to be pronounced "VEE-NAV")* Vertical navigation
VOLMET	Meteorological information for aircraft in flight
VORTAC	VOR and TACAN combination
WAAS	Wide area augmentation system
WILCO	Will comply

ABBREVIATIONS AND TERMS TO BE TRANSMITTED AS SPOKEN WORDS WHEN USED IN RADIOTELEPHONY

ENCODE

Abbreviated precision approach path indicator *(to be pronounced "AY-PAPI")*	APAPI
Abbreviated T visual approach slope indicator system *(to be pronounced "AY-TEE-VASIS")*	AT-VASIS
Aerodrome forecast *(in meteorological code)*	TAF
Aerodrome routine meteorological report *(in meteorological code)*	METAR
Aerodrome special meteorological report *(in meteorological code)*	SPECI
Airborne collision avoidance system *(to be pronounced "AY-CAS")*	ACAS
Aircraft communication addressing and reporting system *(to be pronounced "AY-CARS")*	ACARS
Air defence identification zone *(to be pronounced ''AY-DIZ")*	ADIZ
Air-report	AIREP
Alert phase	ALERFA
Area navigation *(to be pronounced "AR-NAV")*	RNAV
Automatic terminal information service *(to be pronounced "AY-TIS")*	ATIS
Aviation gasoline	AVGAS
Barometric vertical navigation *(to be pronounced "BAA-RO-VEE-NAV")*	BARO-VNAV
Cloud base	BASE
Cloud top	TOP
Common ICAO data interchange network	CIDIN
Data link automatic terminal information service *(to be pronounced "DEE-ATIS")*	D-ATIS
Distress phase	DETRESFA
Electronic flight instrument system *(to be pronounced "EE-FIS")*	EFIS
Emergency location beacon — aircraft	ELBA
European geostationary navigation overlay service *(to be pronounced "EGG-NOS")*	EGNOS
Front *(relating to weather)*	FRONT
Frost *(used in aerodrome warnings)*	FROST
Global navigation satellite system *(to be pronounced "GLO-NAS")*	GLONASS
GPS and geostationary earth orbit augmented navigation	GAGAN
Ground-based augmentation system *(to be pronounced "GEE-BAS")*	GBAS
Ground-based regional augmentation system *(to be pronounced "GRASS")*	GRAS
Identification	IDENT
Information	INFO
Information concerning en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations	SIGMET
Information concerning en-route weather phenomena which may affect the safety of low-level aircraft operations	AIRMET
Lateral navigation *(to be pronounced "EL-NAV")*	LNAV
Local special meteorological report *(in abbreviated plain language)*	SPECIAL
LORAN *(long range air navigation system)*	LORAN
Meteorological *or* meteorology	MET
Meteorological information for aircraft in flight	VOLMET
Minimum operational performance standards	MOPS
Multi-functional transport satellite (MTSAT) satellite-based augmentation system *(to be pronounced "EM-SAS")*	MSAS
National AIS system centre	NASC

None *or* I have nothing to send you	NIL
No significant change *(used in trend-type landing forecasts)*	NOSIG
Notice distributed by means of telecommunication containing information concerning the establishment, conditions or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations	NOTAM
On-line data interchange	OLDI
Operational meteorological *(information)*	OPMET
Operations	OPS
Precision approach path indicator	PAPI
Probability	PROB
Receiver autonomous integrity monitoring	RAIM
Regional AIS system centre	RASC
Regional OPMET bulletin exchange *(scheme)*	ROBEX
Rime *(used in aerodrome warnings)*	RIME
Satellite-based augmentation system *(to be pronounced "ESS-BAS")*	SBAS
Satellite communication *(used only when referring generally to both voice and data satellite communication or only data satellite communication)*	SATCOM
Satellite voice communication	SATVOICE
Selective calling system	SELCAL
Special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format	SNOWTAM
Spot wind	SPOT
Standard instrument arrival	STAR
Standard instrument departure	SID
Tail wind	TAIL
Temporary *or* temporarily	TEMPO
Traffic alert and collision avoidance system resolution advisory *(to be pronounced "TEE-CAS-AR-AY")*	TCAS RA
Traffic information broadcast by aircraft	TIBA
Trend forecast	TREND
Tsunami *(used in aerodrome warnings)*	TSUNAMI
T visual approach slope indicator system *(to be pronounced "TEE–VASIS")*	T-VASIS
UHF tactical air navigation aid	TACAN
Uncertainty phase	INCERFA
Until	TIL
Vertical navigation *(to be pronounced "VEE-NAV")*	VNAV
Visibility, cloud and present weather better than prescribed values or conditions *(to be pronounced ''KAV-OH-KAY'')*	CAVOK
VOR and TACAN combination	VORTAC
Wide area augmentation system	WAAS
Will comply	WILCO

THE NOTAM CODE

PREFACE

(See 5.2.5.1.2 and Appendix 3 of the PANS-AIM.)

1. Introduction

The NOTAM Code is provided to enable the coding of information regarding the establishment, condition or change of radio aids, aerodromes and lighting facilities, dangers to aircraft, or search and rescue facilities. The NOTAM Code is a comprehensive description of information contained in NOTAM. It serves as an important criterion for storage and retrieval of information, as well as for deciding whether an item is of operational significance or not. It also establishes the relevance of the NOTAM to the various types of flight operations and determines whether it must therefore be part of a pre-flight information bulletin. In addition, it assists in specifying those items which are subject to immediate notification processes. The NOTAM Code also standardizes the presentation of the related plain-language text required at Item E) of the NOTAM Format as contained in Appendix 3 of the PANS-AIM. Thus, the NOTAM Code is the basis for determination of the qualifiers TRAFFIC, PURPOSE and SCOPE used in the Q (Qualifiers) line and the related text to appear in Item E) of the NOTAM Format.

2. Procedures

The transmission of NOTAM over the international aeronautical telecommunication service is governed by the appropriate sections of Annex 10, Volume II, Annex 15 and the PANS-AIM. The former contains information on the acceptability of and priority to be accorded to NOTAM for transmission over the aeronautical fixed service (AFS), the latter full instructions on the textual format and contents of NOTAM.

3. Composition

General

3.1 All NOTAM Code groups contain a total of five (5) letters. The first letter of the code group is always the letter Q to indicate that it is a code abbreviation for use in the composition of NOTAM. The letter Q has been chosen to avoid conflict with any assigned radio call sign.

3.2 The second and third letters identify the subject reported upon and the fourth and fifth letters denote its status of operation. The code identifying the subject or denoting its status of operation is, whenever possible, self-evident. Where more than one subject could be identified by the same self-evident code, the most important subject is chosen.

3.3 If the subject of the NOTAM is not listed in the NOTAM Code, insert “XX” as the second and third letters.

3.4 If the condition of the subject is not listed in the NOTAM Code, insert “XX” as the fourth and fifth letters.

3.5 When a NOTAM is issued containing a checklist of valid NOTAM, use KKKK as the second, third, fourth and fifth letters. When a NOTAM containing operationally significant information is issued in accordance with Chapter 6 of Annex 15 and Chapter 6 of the PANS-AIM, and when it is used to announce the existence of AIRAC AIP amendments or supplements (trigger NOTAM), insert “TT” as the fourth and fifth letters.

Classification by subject (second and third letters)

3.6 Facilities, services and other information which require coding have been classified by subject into sections and subsections. The second letter of the code group, which may be any letter of the alphabet except Q, indicates the subject subsections as follows:

AGA (Aerodromes)

. . . . .	LIGHTING facilities	— L
. . . . .	MOVEMENT and landing area	— M
. . . . .	FACILITIES and services	— F

ATM (Air Traffic Management)

. . . . .	AIRSPACE organization	— A
. . . . .	air traffic and VOLMET SERVICES	— S
. . . . .	air traffic PROCEDURES	— P

CNS (Communications, Navigation and Surveillance)

. . . . .	COMMUNICATION and radar facilities	— C
. . . . .	INSTRUMENT and microwave landing systems	— I
. . . . .	GNSS services	— G
. . . . .	terminal and en-route NAVIGATION facilities	— N

Navigation Warnings

. . . . .	airspace RESTRICTIONS	— R
. . . . .	WARNINGS	— W

Other Information

. . . . .	OTHER information	— O

Classification by status (fourth and fifth letters)

3.7 The fourth letter of the code group, which may be any letter of the alphabet except Q, indicates status subsections as follows:

A	AVAILABILITY
C	CHANGES
H	HAZARD conditions
L	LIMITATIONS
XX	Other

3.8 The following fourth and fifth letters of the NOTAM Code should be used in NOTAM cancellations:

AK: RESUMED NORMAL OPERATION

AL: OPERATIVE (OR REOPERATIVE) SUBJECT TO PREVIOUSLY PUBLISHED LIMITATIONS/CONDITIONS

AO: OPERATIONAL

CC: COMPLETED

XX: PLAIN LANGUAGE

4. Significations/uniform abbreviated phraseology

The significations/approved uniform abbreviated phraseology assigned to NOTAM Code groups, as required for use in Item E) of the NOTAM Format (PANS-AIM, Appendix 3), are to be amplified or completed where necessary by the addition of appropriate location indicators, name of station, geographical coordinates, abbreviations, frequencies, call signs, figures and plain language. ICAO abbreviations are to be used in preference to plain language wherever possible. In order to facilitate the dissemination of NOTAM by reducing the transmission time over telecommunication channels, eliminate translation and provide a suitable pre-flight information bulletin entry, the approved uniform abbreviated phraseology assigned to each signification of a two-letter combination in the NOTAM Code — Decode part is to be used in preference to significations wherever possible.

Note.— In addition, to meet certain requirements, a State may wish to provide a translation of the approved uniform phraseology in another language.

5. Text in parentheses

The information necessary to complete a signification/uniform abbreviated phraseology, as indicated between parentheses, shall be given as applicable.

6. Amplification of significations/uniform abbreviated phraseology

The following is applicable to amplification of significations/uniform abbreviated phraseology:

a) amplifications relating to significations/uniform abbreviated phraseology of the second and third letters (subject of the NOTAM) must *precede* signification/uniform abbreviated phraseology of the NOTAM Code;

b) amplifications relating to significations/uniform abbreviated phraseology of the fourth and fifth letters (status of operation) must *follow* signification/uniform abbreviated phraseology of the NOTAM Code.

Examples (as applicable to Item E) of the NOTAM Format)

a) The touchdown zone lights of RWY 27 are not available due to power failure.

E) RWY 27 RTZL NOT AVBL DUE PWR FAILURE

b) The taxiway edge lights of taxiway B are obscured by snow.

E) TWY B EDGE LGT OBSC BY SN

c) On the strip of RWY 09/27 snow banks to a height of 15 ft exist.

E) RWY 09/27 STRIP SN BANKS HGT 15 FT

d) The minimum sector altitude in the sector 90° to 180° inbound VOR ident DOM changed to 3 600 ft MSL.

E) 90 TO 180 DEG INBD VOR DOM MSA CHANGED 3 600 FT MSL

7. Use of NOTAM Code groups

7.1 Five-letter NOTAM Code groups are to be used in conjunction with the NOTAM Format (Annex 15, 5.4.2.2 and PANS-AIM, 5.2.5.1.1 and Appendix 3). They also constitute the basis for determination of the qualifiers Traffic, Purpose and Scope. Both NOTAM Code groups and NOTAM qualifiers are to be inserted in the Q (Qualifiers) line of the NOTAM Format.

Note.— The most commonly used NOTAM Code groups and their respective relation with the qualifiers Traffic, Purpose and Scope are presented in the NOTAM Selection Criteria tables (Doc 8126 — Aeronautical Information Services Manual, *Appendix B to Chapter 6).*

7.2 Five-letter NOTAM Code groups are formed in the following manner:

FIRST LETTER

The letter Q (see 3.1).

SECOND AND THIRD LETTERS

The appropriate combination of two letters selected from the *Second and Third Letters* section of the NOTAM Code to identify the facility, service or danger to aircraft being reported upon. (See 3.3, 3.5 and 3.6.)

FOURTH AND FIFTH LETTERS

The appropriate combination of two letters selected from the *Fourth and Fifth Letters* section of the NOTAM Code to denote the status of operation of the facility, service or danger to aircraft reported upon. (See 3.4, 3.5 and 3.7.)

Examples

Note.— In the examples of NOTAM below, the letters Q to G inclusive, each followed by a closing parenthesis, identify an item in the NOTAM Format (PANS-AIM, Appendix 3).

a) The distance measuring equipment (DME), at Paris/Orly, will not be available from the 31st day of March 1992 at 2359 UTC until the 1st day of April 1992 at 0600 UTC.