



Advisory Circular

Subject: Glossary for Pilots and Air Traffic Services Personnel

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Table of contents

1.0	Introduction	3
1.1	Purpose	3
1.2	Applicability	3
1.3	Description of changes.....	3
2.0	References and requirements.....	5
2.1	Reference documents.....	5
2.2	Cancelled documents.....	6
2.3	Definitions and abbreviations.....	6
3.0	Background	7
4.0	Glossary	8
4.1	Notes to users	8
4.2	– A –	10
4.3	– B –	42
4.4	– C –	46
4.5	– D –	60
4.6	– E –	67
4.7	– F –	74
4.8	– G –	85
4.9	– H –	89
4.10	– I –	94
4.11	– J –	102
4.12	– K –	103
4.13	– L –	104
4.14	– M –	112
4.15	– N –	123
4.16	– O –	129
4.17	– P –	134
4.18	– Q –	144
4.19	– R –	145
4.20	– S –	160

4.21	- T -	171
4.22	- U -	182
4.23	- V -	185
4.24	- W -	191
4.25	- Z -	195
5.0	Information management	196
6.0	Document history	196
7.0	Contact us	196
Appendix A—Conversion tables		197
Table 1	Hectopascals (millibars) to inches of mercury	197
Table 2	Temperature: degrees C to degrees F	197
Table 3	Conversion factors	198

1.0 Introduction

- (1) This Advisory Circular (AC) is provided for information and guidance purposes. It describes an example of an acceptable means, but not the only means, of demonstrating compliance with regulations and standards. This AC on its own does not change, create, amend or permit deviations from regulatory requirements, nor does it establish minimum standards.

1.1 Purpose

- (1) The purpose of this AC is to provide the entire Canadian aviation community with a glossary of aeronautical terms and definitions used by Canadian pilots, controllers and flight service specialists in order to avoid misunderstandings between them and contribute to the continued efficiency and safety of the air navigation system (ANS). The Glossary serves mainly to highlight the differences between Canadian terminology and definitions, and those from the International Civil Aviation Organization (ICAO) and the Federal Aviation Administration (FAA).

1.2 Applicability

- (1) This document applies to all Transport Canada Civil Aviation (TCCA) employees and to individuals and organizations when they are exercising privileges granted to them under an External Ministerial Delegation of Authority. This information is also available to the aviation industry for information purposes.

1.3 Description of changes

- (1) This document, formerly AC 100-001, Issue 06, has been reissued as AC 100-001, Issue 07, to reflect the following changes:
 - (a) Editorial and format changes were made throughout the Glossary where necessary and those that were deemed insignificant in nature were not included in this subsection.
 - (b) Section 4.0—Glossary
 - (i) Entries added:
 - [aeronautical fixed service \(AFS\)](#)
 - [AFS](#)
 - [cockpit voice recorder \(CVR\)](#)
 - [command and control link](#)
 - [control station](#)
 - [C2 link](#)
 - [CVR](#)
 - [FDR](#)
 - [flight data recorder \(FDR\)](#)
 - [flyaway](#)
 - [fly-away](#)
 - [forward-looking wind shear warning system \[ICAO\]](#)
 - [GPWS](#)
 - [ground proximity warning system \(GPWS\)](#)

[ICAO 3LD](#)

[ICAO three-letter designator \(ICAO 3LD\)](#)

[“Large” \[U.S.\]](#)

[light aircraft](#)

[LL \[U.S.\]](#)

[LLWS](#)

[lost command and control link](#)

[lost C2 link](#)

[lost link](#)

[lost-link procedure](#)

[low-level wind shear \(LLWS\)](#)

[MBST \[U.S. and ICAO\]](#)

[medium aircraft](#)

[microburst](#)

[obstacle limitation surface \(OLS\)](#)

[OLS](#)

[predictive wind shear alert system \(PWS\) \[U.S.\]](#)

[predictive wind shear system \(PWS\)](#)

[PWS](#)

[rapid-exit taxiway indicator lights \(RETIL\)](#)

[reactive wind shear system \(RWS\)](#)

[remote pilot station \(RPS\) \[ICAO\]](#)

[RETIL](#)

[RPAS incursion \[Canada\]](#)

[RPS \[ICAO\]](#)

[RWS](#)

[site survey](#)

[“Small” \[U.S.\]](#)

[TAWS](#)

[terrain awareness and warning system \(TAWS\)](#)

[terrain awareness warning system \(TAWS\)](#)

[3LD](#)

[three-letter designator \(3LD\)](#)

[VCOA](#)

[visual climb over airport \(VCOA\) \[U.S.\]](#)

[visual climb over the airport \(VCOA\)](#)

- (ii) Entries deleted:
 - Direct User Access Terminal (DUATS)
 - DUATS
- (iii) Entries modified:
 - [aeronautical fixed telecommunications network \(AFTN\)](#)
 - [flight recorder](#)
 - [go-around](#)
 - [“Heavy”](#)
 - [high speed taxiway](#)
 - [navigation aid \(NAVAID\)](#)
 - [NOTAM](#)
 - [obstacle departure procedure \(ODP\)](#)
 - [overshoot](#)
 - [remotely piloted aircraft \(RPA\)](#)
 - [remotely piloted aircraft system \(RPAS\)](#)
 - [runway excursion](#)
 - [“Super”](#)
 - [wake turbulence](#)
 - [wind shear](#)

2.0 References and requirements

2.1 Reference documents

- (1) It is intended that the following reference materials be used in conjunction with this document:
 - (a) [Aeronautics Act](#) (R.S.C., 1985, c. A-2);
 - (b) [Canada Transportation Act](#) (CTA);
 - (c) [Canadian Transportation Accident Investigation and Safety Board Act](#) (CTAISB Act);
 - (d) [National Defence Act](#) (R.S.C., 1985, c. N-5);
 - (e) [Canadian Aviation Regulations](#) (CARs);
 - (f) *Airworthiness Manual* (AWM);
 - (g) Aerodrome Standards and Recommended Practices (TP 312);
 - (h) Criteria for the Development of Instrument Procedures (TP 308/GPH 209);
 - (i) [Transport Canada Aeronautical Information Manual](#) (TC AIM) (TP 14371);
 - (j) Aviation Weather Services Standards and Criteria (TP 7411);
 - (k) Materiel and Contracting Services Manual (TP 103);
 - (l) Wildlife Control Procedures Manual (TP 11500);

- (m) [Manual of Standards and Procedures for Aviation Weather Forecasts](#) (MANAIR) (TP 12591);
- (n) [Manual of Surface Weather Observations](#) (MANOBS);
- (o) [AIP Canada \(ICAO\)](#);
- (p) Manual of Air Traffic Services (MATS);
- (q) Air Traffic Services Administration and Management Manual (ATSAMM);
- (r) Canada Air Pilot (CAP);
- (s) Canada Flight Supplement (CFS);
- (t) Canada Water Aerodrome Supplement (CWAS);
- (u) [Designated Airspace Handbook](#) (DAH);
- (v) Flying the Weather—VFR;
- (w) Canadian Airspace Review (CAR) Terminology Committee;
- (x) Electronics and Telecommunications Terminology Committee (CUTEL);
- (y) FAA [Federal Aviation Regulations](#) (FARs);
- (z) FAA [Aeronautical Information Manual](#) (AIM);
- (aa) FAA [Pilot/Controller Glossary](#);
- (bb) [United States Standard for Terminal Instrument Procedures](#) (TERPS), FAA Order 8260.3;
- (cc) Annexes 1 to 19 (ICAO);
- (dd) Procedures for Air Navigation Services—Aircraft Operations (PANS-OPS) (ICAO Doc 8168);
- (ee) Procedures for Air Navigation Services—Air Traffic Management (PANS-ATM) (ICAO Doc 4444). Formerly the Procedures for Air Navigation Services—Rules of the Air and Air Traffic Services (PANS-RAC);
- (ff) Heliport Manual (ICAO Doc 9261);
- (gg) Definitions (ICAO Doc 9569);
- (hh) International Civil Aviation Vocabulary (ICAO Doc 9713);
- (ii) ICAO Lexicon (ICAO Doc 9294);
- (jj) Terminology Bulletins Nos. 4 and 10 (ICAO);
- (kk) NATO Glossary of Terms and Definitions (English and French) (AAP 6); and
- (ll) International Electrotechnical Commission (IEC)—Radiocom. pub. No. 50 (60).

2.2 Cancelled documents

- (1) Not applicable.
- (2) By default, it is understood that the publication of any new issue of a document automatically renders all earlier issues of the same document null and void.

2.3 Definitions and abbreviations

- (1) The following **definitions** are used in this document:

- (a) **Advisory Circular (AC):** A document that provides the aviation community and TCCA personnel with information on a given subject as it relates to the CARs, its associated Standards, and other Regulations used in implementing the Civil Aviation Program. An AC is considered to be guidance and is not mandatory. An AC does not change, create, amend or permit deviations from regulatory requirements.
 - (b) **Canadian Aviation Regulations (CARs):** A compilation of regulatory requirements designed to enhance safety and the competitiveness of the Canadian aviation industry. They correspond to the broad areas of aviation which TCCA is mandated to regulate, for example personnel licensing, airworthiness and commercial air services.
- (2) The following **abbreviations** are used in this document:
- (a) **ANS:** Air Navigation System
 - (b) **CARs:** *Canadian Aviation Regulations*
 - (c) **DND:** Department of National Defence (Canada)
 - (d) **ICAO:** International Civil Aviation Organization
 - (e) **NATO:** North Atlantic Treaty Organization
 - (f) **TC:** Transport Canada
 - (g) **TCCA:** Transport Canada Civil Aviation
 - (h) **U.S.:** United States

3.0 Background

- (1) In 1979, the Commission of Inquiry into Bilingual Air Traffic Services in Quebec, in its final report, confirmed the requirement to use French as a communication language between air traffic control personnel and pilots for several Quebec aerodromes and terminal radar service areas (TRSA). The Commission recommended that a number of aeronautical documents be published in French as well as in English, and that Transport Canada (TC) provide material in French for training. It had stated, in 1977, that “The standardization of terminology is an important factor in maintaining and improving air safety.” This statement stems from the Laurendeau-Dunton Royal Commission on Bilingualism and Biculturalism findings in the 1960s.
- (2) In 1979, the Aerospace Medical Association recognized that “Precise and mutually comprehensible speech communication is essential for safe air operations. This involves the development and use of accurate technical terminology evolved from accumulated experience.” Considering that terminology standardization is a nationally and internationally recognized safety factor in aviation, TC has progressively introduced an Aviation Terminology Standardization program.
- (3) The Canadian Airspace Review, a joint government/users project initiated in 1985, conducted an in-depth study of policies, rules and procedures relating to the management and operation of the Air Navigation System (ANS). As part of its findings, in 1987, the Canadian Airspace Review recommended the development and publication of a glossary of aeronautical terms and definitions used by Canadian pilots, controllers and flight service specialists, in order to avoid potential misunderstandings between them, particularly during international operations. The basic objective of such a glossary was to contribute to the continued efficiency and safety of the air navigation system by doing the following:
 - (a) promoting greater understanding of aeronautical terminology among providers and users of air traffic services;

- (b) facilitating access to aeronautical information necessary for the conduct of air operations; and
 - (c) increasing awareness, in the national and international aviation communities, of differences in aeronautical terminology as used in Canada, the International Civil Aviation Organization (ICAO) and the American Federal Aviation Administration (FAA)
- (4) In keeping with the intent of the appropriate Canadian Airspace Review recommendations, TC, in conjunction with the Department of National Defence (DND) and in consultation with the Canadian civil aviation community, developed the Pilot/Controller Glossary to serve as a reference document for the entire Canadian aviation community. Now known as the Glossary for Pilots and Air Traffic Services Personnel, the text has been revised in conjunction with NAV CANADA as well. This glossary in no way constitutes a regulatory document, but serves rather to illustrate the aeronautical terminology used in Canada and emphasize any differences in terms or definitions as used by ICAO or the FAA.
- (5) The Glossary is managed by the Glossary Committee, which includes representatives from TC, DND and NAV CANADA. The committee meets at least twice a year at TC's Headquarters to discuss relevant terms to be added or updated as needed. Prior to the meetings, the Aviation Terminology Standardization Division makes and receives proposals and carries out all the necessary research in order to prepare the terminology case files. All new term proposals must be vetted by a designated member of the committee before they are presented. Following the meetings, an official decision record is drafted to document all decisions made, and it is signed by the signatory members of the committee before any changes are introduced by the Aviation Terminology Standardization Division.
- (6) The Glossary for Pilots and Air Traffic Services Personnel is updated regularly as the ANS evolves and in response to operational requirements that may result from the introduction of new communications, navigation, surveillance and air traffic management technologies.

4.0 Glossary

4.1 Notes to users

- (1) This glossary is a compilation of aeronautical terms drawn from nearly 60 references (see [subsection 2.1](#)).
- (2) Glossary **entries** are composed of terms or abbreviations and are listed in absolute alphabetical order (letter by letter). If numeral entries are present, they are alphabetized as if they were spelled out.
- (3) **Quotation marks** surrounding an entry indicate that it is an element of the phraseology used by pilots, controllers and flight service specialists.
- (4) Each entry is followed by a **block of information** containing a definition or a main cross reference.
- (5) When an entry is specific to a **particular context**, a marker identifying the context in which the entry is used (e.g. Canada, ICAO, U.S., DND) precedes or is contained in the block of information. A key to these abbreviations is provided in paragraph 2.3 above.
- (6) The main **cross references** are as follows:
- (a) Abbreviation for:
 - (i) indicates that the entry is an abbreviation for the term that follows (example: AIC—Abbreviation for: aeronautical information circular)
 - (b) Other expression for:

- (i) indicates that the entry is a synonym of the term that follows (example: controller—Other expression for: air traffic controller)
- (c) ICAO: Expression for:
 - (i) indicates that the entry is used in the context provided (in this case, ICAO) to mean the same thing as the term that follows (example: emergency operations centre—ICAO: Expression for: emergency coordination centre (ECC))
- (7) Blocks of information are sometimes followed by added information introduced by a bullet (•):
 - (a) • abbreviation: indicates an abbreviation
 - (b) • also called: indicates a synonym
 - (c) • see: indicates the entry where the term is defined
 - (d) • see also: indicates a related entry for comparison
- (8) When a **French equivalent** exists, it is provided in italics at the end of the block of information. Any other **foreign words** used in blocks of information are also written in italics.
- (9) When a term or expression denotes **more than one concept**, each concept is defined in a separate block of information and each block of information is numbered.
- (10) Terms attributed to **ICAO**, to **NATO**, or to the **U.S.** are given with their official definitions.
- (11) **Numbers** are represented according to the standards established by the International Organization for Standardization (ISO) and adopted by ICAO (see: ICAO Annex 5), that is, using a space to indicate thousands and the decimal point for decimals (10 000.00). There is an exception to this rule, however: numbers under 10 000 are written without the space separating thousands from hundreds (1000 to 9999).
- (12) Generally, the imperial system of measures has been used in the definitions. In some instances, the metric system has also been used. There are conversion tables at the end of the Glossary to facilitate conversion into imperial or metric units.

4.2 – A –

AAE

(1) Abbreviation for: **above aerodrome elevation**

- see: **aerodrome elevation**

Fr: AAE

(2) U.S.: Abbreviation for: **above airport elevation**

- see: **aerodrome elevation**

AAI

(1) Abbreviation for: **average arrival interval**

Fr: AAI

(2) U.S.: Abbreviation for: **arrival aircraft interval**

- see: **average arrival interval**

AAIM

Abbreviation for: **aircraft autonomous integrity monitoring**

Fr: AAIM

AAS

Abbreviation for: **aerodrome advisory service**

Fr: AAS

AAT

Abbreviation for: **assigned arrival time**

Fr: AAT

ABAS

Abbreviation for: **aircraft-based augmentation system**

Fr: ABAS

abbreviated precision approach path indicator

A visual glide slope indicator (VGSI) consisting of only two light units normally situated on the left side of the runway in the form of a wing bar and indicating that the aircraft is on slope if the unit nearest the runway shows red and the unit furthest from the runway shows white, too high if both units show white, and too low if both units show red.

- abbreviation: APAPI

- see also: **precision approach path indicator (PAPI)** and **visual glide slope indicator (VGSI)**

Fr: indicateur de trajectoire d'approche de précision simplifié

abbreviated visual approach slope indicator

U.S. and Canada: A visual glide slope indicator (VGSI) consisting of only two light units normally situated on the left side of the runway, one upwind and one downwind, and indicating that the aircraft is on slope if the upwind unit shows red and the downwind unit shows white, too high if both units show white, and too low if both units show red.

- abbreviation: AVASI

- see also: **visual approach slope indicator (VASI)** and **visual glide slope indicator (VGSI)**

Fr: indicateur visuel de pente d'approche simplifié

abeam

A term that describes the general position of the aircraft in relation to a fix, point or object when that fix, point or object is approximately 90° to the right or left of the aircraft track.

- abbreviation: ABM

Fr: par le travers

ABM

- (1) Abbreviation for: **abeam**
Fr: ABM
- (2) ICAO: Abbreviation for: **asynchronous balanced mode**

ABN

ICAO: Abbreviation for: **aerodrome beacon**
Fr: ABN

abort (to)

To terminate a planned aircraft manoeuvre.
Fr: interrompre

aborted landing

A planned landing that is discontinued for reasons such as conflicting traffic, weather, or landing surface obstacles.

- also called: rejected landing

Fr: atterrissage interrompu

aborted takeoff

A planned takeoff that is discontinued for reasons such as conflicting traffic, aircraft malfunction, weather or takeoff surface obstacles.

- also called: rejected takeoff

Fr: décollage interrompu

A/C

Abbreviation for: **aircraft**
Fr: A/C

ACA

Abbreviation for: **Arctic Control Area**
Fr: ACA

ACAS

Abbreviation for: **airborne collision avoidance system**
Fr: ACAS

ACC

Abbreviation for: **area control centre**
Fr: ACC

accident

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

- (a) a person is fatally or seriously injured as a result of
- (i) being in the aircraft, or
 - (ii) direct contact with any part of the aircraft, including parts that have become detached from the aircraft, or
 - (iii) direct exposure to jet blast, *except* when the injuries are the result of natural causes, are self-inflicted or are inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

- (b) the aircraft sustains damage or structural failure that
 - (i) adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - (ii) would normally require major repair or replacement of the affected component, *except* for engine failure or damage, when the damage is limited to a single engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreen, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or
- (c) the aircraft is missing or is completely inaccessible.

Note 1: For statistical uniformity only, an injury resulting in death within 30 days of the date of the accident is classified as a fatal injury by ICAO.

Note 2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

- also called: aircraft accident
Fr: accident

ACFT

Abbreviation for: **aircraft**
Fr: ACFT

ACID

Abbreviation for: **aircraft identification**
Fr: ACID

“Acknowledge”

An expression used in radiocommunication meaning “Let me know that you have received and understood this message.”

Fr: « Accusez réception »

acknowledgement

Notification that a given communication has been correctly received and understood.

Fr: accusé de réception

ACN

ICAO: Abbreviation for: **aircraft classification number**
Fr: ACN

acrobatic flight

ICAO and U.S.: Expression for: **aerobatic manoeuvre**

ACSC

Abbreviation for: **aircraft critical surface contamination**
Fr: CSCA

active runway

Other expression for: **runway in use**

acts of unlawful interference

Acts or attempted acts such as to jeopardize the safety of civil aviation and air transport, i.e.:

- (a) unlawful seizure of aircraft in flight;
- (b) unlawful seizure of aircraft on the ground;
- (c) hostage-taking on board aircraft or on aerodromes;
- (d) forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility;
- (e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes;

- (f) communication of false information such as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility.

- see also: **hijacking**

Fr: actes d'intervention illicite

A/D

Abbreviation for: **aerodrome**

Fr: AD

AD

Abbreviation for: **aerodrome**

Fr: AD

ADF

(1) Abbreviation for: **automatic direction finder** or **automatic direction-finding equipment**

Fr: ADF

(2) Abbreviation for: **adjusted delay factor**

Fr: ADF

ADIZ

(1) Abbreviation for: **air defence identification zone**

Fr: ADIZ

(2) U.S.: Abbreviation for: **air defense identification zone**

adjusted delay factor

The required delay to be applied to an aircraft's proposed departure time when flow control restriction procedures are in effect.

- abbreviation: ADF

Fr: facteur ajusté de retard

ADS

Abbreviation for: **automatic dependent surveillance**

Fr: ADS

ADS-B

Abbreviation for: **automatic dependent surveillance - broadcast**

Fr: ADS-B

ADS-C

Abbreviation for: **automatic dependent surveillance - contract**

Fr: ADS-C

ADS-contract

Abbreviation for: **automatic dependent surveillance - contract**

Fr: ADS-contrat

ADT

Abbreviation for: **assigned departure time**

Fr: ADT

advanced ultralight aeroplane

An aeroplane having a type design that is in compliance with the standards specified in the document entitled *Design Standards for Advanced Ultra-light Aeroplanes* published by the Light Aircraft Manufacturers Association of Canada (2004).

- abbreviation: AULA

- see also: **basic ultralight aeroplane**

Fr: avion ultra-léger de type évolué

“Advise intentions”

An expression used in radiocommunication meaning “Tell me what you plan to do.”

Fr: « Quelles sont vos intentions? »

advisory airspace

(1) Canada: An airspace of defined dimensions within which a high volume of pilot training or an unusual type of aerial activity may be carried out.

- also called: advisory area

Fr: espace aérien à service consultatif

(2) ICAO: An airspace of defined dimensions, or a designated route, within which air traffic advisory service is available.

Fr: espace aérien à service consultatif

advisory area

(1) Canada: Other expression for: **advisory airspace (1)**

(2) ICAO: Other expression for: **advisory airspace (2)**

aerobatic manoeuvre

(1) A manoeuvre where a change in the attitude of an aircraft results in a bank angle greater than 60°, an abnormal attitude or an abnormal acceleration not incidental to normal flying.

- also called: acrobatic flight

Fr: acrobatie aérienne

(2) DND: A manoeuvre intentionally performed by an aircraft involving an abrupt change in altitude, an abnormal attitude or an abnormal variation in speed or flight path.

Fr: acrobatie aérienne

aerodrome

Any area of land, water (including the frozen surface thereof) or other supporting surface used, designed, prepared, equipped or set apart for use, either in whole or in part, for the arrival, departure, movement or servicing of aircraft. This includes any buildings, installations and equipment situated thereon or associated therewith.

- abbreviations: A/D or AD

Fr: aéroport

aerodrome advisory service

The provision, by an FSS, of information pertinent to the arrival and departure phases of flight and for transit through a mandatory frequency (MF) area.

- abbreviation: AAS

Fr: service consultatif d'aéroport

aerodrome beacon

A beacon used to indicate the location of an aerodrome from the air. Beacons may consist of either a rotating light source or a strobe light.

Fr: phare d'aéroport

aerodrome controller

DND: An officer who has successfully completed a formal aerodrome controller course and has been rated as competent to control aerodrome and ground traffic in accordance with Canadian Forces regulations.

Fr: contrôleur d'aéroport

aerodrome control service

ICAO: Air traffic control service for aerodrome traffic.

Fr: service de contrôle d'aéroport

aerodrome elevation

The elevation of the highest point of the landing area.

- also called: field elevation

Fr: altitude d'aérodrome

aerodrome geometric centre

The centre of the runway complex that locates the aerodrome for charting purposes, determined by calculating the mean of the latitudes of the northernmost runway threshold and the southernmost runway threshold, and the mean of the longitudes of the easternmost runway threshold and the westernmost runway threshold.

- abbreviation: AGC
- see also: **aerodrome geometric centre coordinates (AGCC)**

Fr: centre géométrique de l'aérodrome

aerodrome geometric centre coordinates

The latitude and longitude, to the nearest second, of the aerodrome geometric centre.

- abbreviation: AGCC
- see also: **aerodrome geometric centre (AGC)**

Fr: coordonnées du centre géométrique de l'aérodrome

aerodrome operator

The person in charge of an aerodrome, including an employee, agent or other authorized representative of that person.

Fr: exploitant d'aérodrome

aerodrome reference point

A designated geographical location of an aerodrome given to the nearest second of latitude and longitude.

- abbreviation: ARP

Note: The aerodrome reference point is located near the initial or planned geometric centre of the aerodrome and normally remains where first established.

Fr: point de référence d'aérodrome

aerodrome routine meteorological report

A surface weather observation that uses data collected by human observers or automated stations.

- abbreviation: METAR
- also called: aviation routine weather report
- see also: **aerodrome special meteorological report**

Fr: message d'observation météorologique régulière d'aérodrome

aerodrome special meteorological report

A special aviation weather observation issued at times other than on the hour, as a result of significant weather change.

- abbreviation: SPECI
- also called: aviation special weather report
- see also: **aerodrome routine meteorological report**

Fr: message d'observation météorologique spéciale d'aérodrome

aerodrome traffic

All traffic on the manoeuvring area of an aerodrome and all aircraft flying in, entering or leaving an aerodrome traffic circuit.

Fr: circulation d'aérodrome

aerodrome traffic circuit

The specified path to be flown by aircraft operating in the vicinity of an aerodrome.

- also called: circuit, traffic circuit, traffic pattern

Fr: circuit d'aérodrome

aerodrome traffic frequency

A very high frequency (VHF) designated to ensure that all radio-equipped aircraft operating at or in the vicinity of an aerodrome, or in a defined area where VFR traffic is high, are listening on a common frequency and following a common reporting procedure.

- abbreviation: ATF

Fr: fréquence de trafic d'aérodrome

aeronautical beacon

Other expression for: **beacon**

aeronautical chart

A representation of a portion of the earth, its culture and relief, specifically designated to meet the requirements of air navigation.

Fr: carte aéronautique

aeronautical fixed service

A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

- abbreviation: AFS
- see also: **aeronautical fixed telecommunications network (AFTN)**

Fr: service fixe aéronautique

aeronautical fixed telecommunications network

The integrated worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service, for the exchange of messages between the aeronautical fixed stations within the network.

Note: "Integrated" is to be interpreted as a mode of operation necessary to ensure that messages can be transmitted from an aeronautical fixed station within the network to any other aeronautical fixed station within the network.

- abbreviation: AFTN
- see also: **aeronautical fixed service (AFS)**

Fr: réseau du service fixe des télécommunications aéronautiques

aeronautical ground light

Any light, other than a light displayed on an aircraft, specially provided as an aid to air navigation.

Fr: feu aéronautique à la surface

aeronautical information circular

(1) Canada: A circular providing advance notification of major changes to legislation, regulations, procedures or purely administrative matters, where the text is not part of the *AIP Canada (ICAO)*.

- abbreviation: AIC

Fr: circulaire d'information aéronautique

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

- abbreviation: AIC

Fr: circulaire d'information aéronautique

Aeronautical Information Manual

U.S.: A primary FAA publication whose purpose is to instruct airmen about operating in the National Airspace System of the U.S. It provides basic flight information, ATC procedures and general instructional information concerning health, medical facts, factors affecting flight safety, accident and hazard reporting, and types of aeronautical charts and their use.

- abbreviation: AIM
- see also: **Transport Canada Aeronautical Information Manual (TC AIM)**

Aeronautical Information Publication

A publication issued by or with the authority of a State and that contains aeronautical information of a lasting character essential to air navigation.

- abbreviation: AIP
- see also: **AIP Canada (ICAO)**

Fr: publication d'information aéronautique

Aeronautical Information Regulation and Control

A system aimed at advance notification, based on common effective dates, of circumstances that necessitate changes in operating practices.

- abbreviation: AIRAC

Fr: Régularisation et contrôle de la diffusion des renseignements aéronautiques

aeronautical information service

The provision of information necessary for the safety, regularity and efficiency of domestic and international air navigation.

- abbreviation: AIS

Fr: service d'information aéronautique

aeronautical mobile service

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

Note: Frequencies allocated by Industry Canada to this service may have the identifier (R) or (OR) to indicate which frequency is to be used: on air route (R) or off-route (OR).

- abbreviation: AMS

Fr: service mobile aéronautique

aeronautical product

Any aircraft, aircraft engine, aircraft propeller or aircraft appliance or part, or the component parts of any of those things, including any computer system and software.

Fr: produit aéronautique

aeronautical station

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

Fr: station aéronautique

aeroplane

A power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on surfaces that remain fixed during flight.

Fr: avion

“Affirm”

ICAO: Expression for: “**Affirmative**”

“Affirmative”

An expression used in radiocommunication meaning “Yes.”

Fr: « Affirmatif »

AFIL

Abbreviation for: **airfile**

Fr: AFIL

AFS

Abbreviation for: **aeronautical fixed service**

Fr: SFA

afterimage

A collection of light, dark, or coloured spots, perceived after exposure to bright light, that may be distracting and disruptive and may persist for several minutes.

- see also: **flash blindness** and **glare**

Fr: image rémanente

AFTN

Abbreviation for: **aeronautical fixed telecommunications network**

Fr: AFTN

AGC

Abbreviation for: **aerodrome geometric centre**

AGCC

Abbreviation for: **aerodrome geometric centre coordinates**

Fr: AGCC

AGL

Abbreviation for: **above ground level**

- see: **altitude above ground level**

Fr: AGL

AIC

Abbreviation for: **aeronautical information circular**

Fr: AIC

AID

U.S.: Abbreviation for: **airport information desk**

AIDC

Abbreviation for: **ATS interfacility data communication**

Fr: AIDC

AIM

U.S.: Abbreviation for: **Aeronautical Information Manual**

AIP

Abbreviation for: **Aeronautical Information Publication**

Fr: AIP

AIP Canada (ICAO)

A Canadian publication produced by NAV CANADA that contains aeronautical information of a lasting character essential to air navigation in Canadian airspace.

- see also: **Transport Canada Aeronautical Information Manual** (TC AIM) and **Aeronautical Information Publication** (AIP)

Fr: AIP Canada (OACI)

AIRAC

Abbreviation for: **Aeronautical Information Regulation and Control**

Fr: AIRAC

AIRAC Canada

A type of notice issued weekly by the aeronautical information service (AIS) to provide producers of aeronautical information with advance notification concerning changes within the Canadian Domestic Airspace (CDA) and any other airspace in respect of which Canada has the responsibility for the provision of ATC service.

Fr: AIRAC Canada

airborne collision avoidance system

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

- abbreviation: ACAS
- see also: **traffic alert and collision avoidance system (TCAS)**

Fr: système anticollision embarqué

airborne warning and control system

An airborne radar unit used as an extension of a military radar unit during operations, planned exercises and daily training missions.

- abbreviation: AWACS

Fr: système aéroporté d'alerte et de contrôle

aircraft

(1) Any machine, including a rocket, capable of deriving support in the atmosphere from reactions of the air.

- abbreviations: A/C or ACFT

Fr: aéronef

(2) DND: Flying machines and guided missiles that derive their lift in flight chiefly from aerodynamic forces, and flying devices that are supported chiefly by their buoyancy in air, including any aeroplane, balloon, kite balloon, airship, glider or kite.

- abbreviation: ACFT

Fr: aéronef

(3) ICAO: Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

- abbreviation: ACFT

Fr: aéronef

aircraft accident

Other expression for: **accident**

aircraft approach category

The grouping of aircraft based on speed. The categories are as follows:

- Category A—speed up to 90 kt;
- Category B—speed of 91 to 120 kt;
- Category C—speed of 121 to 140 kt;
- Category D—speed of 141 to 165 kt; and
- Category E—speed above 165 kt.

Fr: catégorie d'aéronefs pour l'approche

aircraft arresting cable

NATO: That portion of an aircraft arresting system which spans the runway surface or flight deck landing area and is engaged by the aircraft arresting hook.

Note 1: The commonly used term in Canadian civil aviation documents is *arrester cable*.

Note 2: The *Canada Flight Supplement (CFS)* contains relevant information on the type and location of arrester cables and precautionary measures.

- see also: **aircraft arresting gear**, **aircraft arresting hook**, and **aircraft arresting system**

Fr: câble d'arrêt d'aéronef

aircraft arresting gear

NATO: A device used to engage hook equipped aircraft to absorb the forward momentum of a routine or emergency landing, or aborted take-off.

Note: The military spelling of *arrester* is *arrestor*, which can be observed in combination with terms such as *gear* and *cable* in some military documents.

- see also: **aircraft arresting cable**, **aircraft arresting hook**, and **aircraft arresting system**

Fr: dispositif d'arrêt d'aéronef

aircraft arresting hook

NATO: A device fitted to an aircraft to engage arresting gear.

- see also: **aircraft arresting cable**, **aircraft arresting gear**, and **aircraft arresting system**

Fr: crosse d'arrêt d'aéronef

aircraft arresting system

NATO: A series of devices used to stop an aircraft by absorbing its momentum in a routine or emergency landing or aborted take-off.

- see also: **aircraft arresting cable**, **aircraft arresting gear**, and **aircraft arresting hook**

Fr: système d'arrêt d'aéronef

aircraft autonomous integrity monitoring

A technology used to augment global positioning systems (GPS) and global orbiting navigation satellite systems (GLONASS) within the global navigation satellite system (GNSS) 1 framework that uses information from the aircraft inertial navigation systems to cross-check the integrity of the GPS signal.

- abbreviation: AAIM

Fr: contrôle autonome d'intégrité à bord

aircraft-based augmentation system

An augmentation system which augments and/or integrates the information obtained from the other GNSS elements with information available on board the aircraft.

- abbreviation: ABAS

- see also: **receiver autonomous integrity monitoring (RAIM)**, **local area augmentation system (LAAS)**, and **wide area augmentation system (WAAS)**

Fr: système de renforcement embarqué

aircraft call sign

A group of alphanumeric characters used to identify an aircraft in air-ground communication.

Fr: indicatif d'appel d'aéronef

aircraft captain

(1) Other expression for: **pilot-in-command (PIC)**

(2) DND and NATO: Expression for: **aircraft commander**

aircraft classification number

ICAO: A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.

Note: ACNs are expressed on a scale from approximately 5 (least demanding aircraft) to 110 (most demanding aircraft). ACNs are applicable only to aircraft having an apron (ramp) mass equal to or greater than 12 600 lb. ACNs have been assigned to present-day aircraft at their maximum and minimum operating masses/weights and at a specific tire pressure. The ACN should not exceed the pavement classification number (PCN) for unrestricted aircraft operations. The ICAO ACN system is the internationally approved and accepted method for ranking aircraft in terms of their pavement-strength requirements.

- abbreviation: ACN

- see also: **aircraft load rating (ALR)**

Fr: numéro de classification d'aéronef

aircraft commander

(1) DND: The pilot, designated by the competent authority, who has command of the aircraft, crew and all persons on board and is responsible for the safe execution of the flight.

- also called: aircraft captain, pilot-in-command

Fr: commandant de bord

(2) NATO: The aircrew member designated by a competent authority as being in command of an aircraft and responsible for its safe operation.

- also called: aircraft captain
Fr: commandant d'aéronef

aircraft critical surface contamination

Presence of substances, including frost, ice and snow, on the critical surfaces of an aircraft that can have an adverse impact on the performance of an aircraft.

- abbreviation: ACSC
Fr: contamination des surfaces critiques d'un aéronef

aircraft emergency

A situation that places an aircraft in a state of danger.
Fr: aéronef en état d'urgence

aircraft identification

A group of letters or figures, or a combination thereof, that is either identical to, or the coded equivalent of the aircraft call sign to be used in air-ground communication and that is used to identify the aircraft in ground-ground ATS communications.

- abbreviation: ACID
Fr: identification d'un aéronef

aircraft incident

An event or sequence of events that may endanger human lives or compromise the safety of aircraft.
Fr: incident d'aéronef

aircraft load rating

Canada: A number expressing the relative structural loading effect of an aircraft on a pavement. ALRs are expressed on a scale from 1 (least demanding aircraft) to 12 (most demanding aircraft). ALRs have been assigned to present-day aircraft at their maximum and minimum operating weights and at a specific tire pressure. The ALR should not exceed the pavement load rating (PLR) for unrestricted aircraft operations. The ALR system for ranking aircraft in terms of their pavement-strength requirements is used exclusively in Canada. For the international reporting of aircraft pavement-strength requirements, the ICAO ACN code is used.

- abbreviation: ALR
- see also: **aircraft classification number (ACN)**
Fr: indice de masse d'aéronef

aircraft movement

- (1) Canada: A takeoff, landing, or simulated approach by an aircraft.
Fr: mouvement d'aéronef
- (2) ICAO: An aircraft takeoff or landing at an airport.
Fr: mouvement d'aéronef

aircraft movement information service

A service provided by area control centres (ACC) for the collection, processing and dissemination of aircraft movement information for use by air defence units.

- abbreviation: AMIS
Fr: service d'information sur les mouvements d'aéronefs

Aircraft Movement Surface Condition Report

The report that details the surface conditions for all aircraft movement areas including runways, taxiways, and aprons.

- abbreviation: AMSCR
- see also: **Canadian Runway Friction Index (CRFI)**
Fr: compte rendu de l'état de la surface pour les mouvements d'aéronefs

aircraft operator

The person in possession of the aircraft, whether as owner, lessee or otherwise.

Fr: utilisateur d'aéronef

aircraft parachute system

A device used to decelerate the free-fall of an aircraft by creating drag through the atmosphere.

- see also: **ballistic parachute system**

Fr: système de parachute d'aéronef

aircraft radio control of aerodrome lighting

A system used by pilots to control some or all of the aerodrome lighting, aside from obstacle lights, via the aircraft VHF transmitter and the microphone on the appropriate frequency.

- abbreviation: ARCAL

Fr: balisage lumineux d'aérodrome télécommandé

aircraft stand

A designated area on an apron to be used for parking an aircraft.

Fr: poste de stationnement d'aéronef

aircraft stand taxilane

A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.

Fr: voie d'accès de poste de stationnement d'aéronef

aircraft type designator

A group of alphanumeric characters used to identify, in an abbreviated form, a type of aircraft.

Fr: indicatif de type d'aéronef

air defence identification zone

An airspace of defined dimensions extending upwards from the surface of the earth within which certain rules for the security control of air traffic apply.

- abbreviation: ADIZ

Fr: zone d'identification de défense aérienne

Note: The abbreviation "ADIZ" is pronounced as a spoken word, "AY DIZ".

- see also: **air defence identification zone (ADIZ)** and **land-based air defence identification zone (land-based ADIZ)**

Fr: zone d'identification de défense aérienne

air defence identification zone

U.S.: An area of airspace over land or water in which the ready identification, location, and control of all aircraft (except for Department of Defense and law enforcement aircraft) is required in the interest of national security.

- abbreviation: ADIZ

- see also: **air defence identification zone (ADIZ)** and **land-based air defence identification zone (land-based ADIZ)**

air defence long-range radar

A military radar sensor system composed of a transmitter, antenna and associated communications that can detect and track targets at all azimuths, ranges and elevations. It is used for tactical warning and attack assessment, and for command and control of fighters in the conduct of air sovereignty missions.

Fr: radar à longue portée de défense aérienne

AIREP

Abbreviation for: **air report**

Fr: AIREP

air evacuation

The evacuation by aircraft of personnel and/or cargo.

Fr: évacuation par air

airfile

Flight plan (FP) or flight itinerary (FI) information filed from an aircraft in flight.

- abbreviation: AFIL

Fr: dépôt en vol

AIRFL

Abbreviation for: **air refuelling**

Fr: AIRFL

air-ground communication

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

- see also: **ground-to-air communication**

Fr: communications air-sol

AIRMET

- (1) Canada: An information message issued by a meteorological watch office (MWO) to advise pilots of the occurrence or expected occurrence of specified weather phenomena, up to and including 24 000 ft (FL 240), which may affect the safety of aircraft operations and which were not already included in the graphic area forecast (GFA), and of the development of those phenomena in time and space.

Note: The criteria for issuing an AIRMET are the unforeseen development, dissipation or non-occurrence of forecast

- (a) instrument meteorological conditions (IMC): broken or overcast cloud condition at less than 1000 ft AGL and/or visibility less than 3 SM;
 - (b) freezing precipitation (not requiring a SIGMET);
 - (c) moderate icing;
 - (d) moderate turbulence;
 - (e) thunderstorms (isolated as opposed to a line);
 - (f) an increase in the surface mean wind over a large area to 20 kt or more, or an increase in gusts to 30 kt or more, when no winds were originally forecast; or
 - (g) a difference between the forecast and observed wind direction greater than 60°.
- see also: **AIRMET information**
- Fr: AIRMET*
- (2) U.S.: In-flight weather advisories issued only to amend the Aviation Surface Forecast, Aviation Cloud Forecast, or area forecast concerning weather phenomena which are of operational interest to all aircraft and potentially hazardous to aircraft having limited capability because of lack of equipment, instrumentation, or pilot qualifications. AIRMETs concern weather of less severity than that covered by SIGMETs or convective SIGMETs. AIRMETs cover moderate icing, moderate turbulence, sustained winds of 30 kt or more at the surface, widespread areas of ceilings less than 1000 ft and/or visibility less than 3 mi., and extensive mountain obscurement.

AIRMET information

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

- see also: **AIRMET**

Fr: renseignements AIRMET

air navigation facility

Any facility used, available for use, or designed for use as a NAVAID including landing areas, lights, any apparatus or equipment for disseminating weather information, for signalling, for radio-directional finding, or for radio or other electrical communication, and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing and takeoff of aircraft.

Fr: installation de navigation aérienne

airport

An aerodrome for which an airport certificate is in force.

- abbreviation: APRT

Fr: aéroport

airport advisory area

U.S.: The area within 10 mi. of an airport without a control tower or where the tower is not in operation, and on which an FSS is located.

airport control

Other expression for: **tower control**

airport controller

A duty controller assigned to the airport control position in an airport control tower.

Fr: contrôleur d'aéroport

airport control service

A control service provided by airport control towers to aircraft and vehicles on the manoeuvring area of an airport and to aircraft operating in the vicinity of an airport.

Fr: service de contrôle d'aéroport

airport elevation

U.S.: Expression for: **aerodrome elevation**

airport information desk

U.S.: An airport unmanned facility designed for pilot self-service briefing, flight planning, and filing of flight plans (FP).

- abbreviation: AID

airport operator

The holder of the airport certificate, or the person in charge of such airport, whether as employee, agent or representative of the holder of such certificate.

Fr: exploitant d'aéroport

Airport Radar Service Area

U.S.: A regulatory airspace surrounding designated airports wherein ATC provides radar vectoring and sequencing on a full-time basis for all IFR and VFR aircraft. The service provided in an ARSA is called ARSA service, which includes:

- (a) IFR/IFR—standard IFR separation;
- (b) IFR/VFR—traffic advisories and conflict resolution; and
- (c) VFR/VFR—traffic advisories and, as appropriate, safety alerts.

The *Aeronautical Information Manual* (AIM) contains an explanation of ARSA. ARSAs are depicted on VFR aeronautical charts.

- abbreviation: ARSA

Airport Reservation Office

U.S.: The office responsible for monitoring the operation of the high density rule. Receives and processes requests for IFR operations at high density traffic airports.

- abbreviation: ARO

airport surface detection equipment

Equipment specifically designed to detect all principal features on the surface of an airport, including aircraft and vehicular traffic, and to present the entire image on a digital display in the control tower in order to augment visual observation by tower personnel of aircraft and/or vehicular movements.

- abbreviation: ASDE

Fr: équipement aéroportuaire de détection de surface

airport taxi chart

U.S.: Expression for: **taxi chart**

airport traffic area

U.S.: Unless otherwise specifically designated in FAR 93, that airspace within a horizontal radius of 5 SM from the geographical center of any airport at which a control tower is operating, extending from the surface up to, but not including, an altitude of 3000 ft above the elevation of an airport.

air refuelling

A procedure used by the military to transfer fuel from one aircraft to another during flight.

- abbreviation: AIRFL
- also called: in-flight refuelling

Fr: ravitaillement en vol

air refuelling control point

The geographical point over which the receiver aircraft arrives in the observation/refuelling position with respect to the assigned tanker.

- abbreviation: ARCP

Fr: point de contrôle de ravitaillement en vol

air refuelling initial point

The geographical point at which the receiver aircraft enters the refuelling track, initiates radio contact with the tanker and begins a manoeuvre to rendezvous.

- abbreviation: ARIP

Fr: point initial de ravitaillement en vol

air report

A report from an aircraft in flight prepared in conformity with requirements for position and operational and/or meteorological reporting.

- abbreviation: AIREP
- also called: in-flight report

Fr: compte rendu en vol

air route

The uncontrolled airspace within the boundaries or along the tracks specified on an aeronautical chart, or the controlled airspace within the boundaries or along the tracks specified in the *Designated Airspace Handbook* (DAH).

Fr: route aérienne

air route surveillance radar

U.S.: An air route traffic control center (ARTCC) radar used primarily to detect and display an aircraft's position while en route between terminal areas. The ARSR enables controllers to provide radar ATC service when aircraft are within the ARSR coverage. In some instances, ARSR may enable an ARTCC to provide terminal radar services similar to but usually more limited than those provided by a radar approach control.

- abbreviation: ARSR

air route traffic control center

U.S.: A facility established to provide ATC service to aircraft operating on IFR flight plans (FP) within controlled airspace and principally during the en-route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.

- abbreviation: ARTCC
- see also: **area control centre** (ACC)

airship

A power-driven lighter-than-air aircraft.

Fr: dirigeable

air show

An aerial display or demonstration before an assembly of persons by one or more aircraft.

Fr: spectacle aérien

airside

The movement area of an airport, including adjacent terrain and buildings or portions thereof, where access is controlled.

Fr: côté piste

air sovereignty test

A flight that is designed to test the detection, identification and reporting functions of the air defence forces (aerospace defence control facility (ADCF) and interceptor or fighter units).

- abbreviation: SUADE
- see also: **special aerospace defence exercise** (SPADE)

Fr: essai de souveraineté aérienne

airspace classification

The division of the Canadian Domestic Airspace (CDA) into seven classes, each identified by a single letter: A, B, C, D, E, F or G. The application of any classification to an airspace structure determines the operating rules, the level of ATC service provided within the structure and, in some instances, communications and equipment requirements. The horizontal and vertical limits of airspace are described in the *Designated Airspace Handbook* (DAH).

(a) Class A airspace

Controlled high-level airspace within which only IFR flight is permitted and ATC separation is provided to all aircraft. The vertical dimensions of Class A high level controlled airspace are as follows:

- Southern Control Area (SCA): 18 000 ft ASL to FL 600 inclusive;
- Northern Control Area (NCA): FL 230 to FL 600 inclusive; and
- Arctic Control Area (ACA): FL 270 to FL 600 inclusive.

(b) Class B airspace

Controlled low-level airspace within which both IFR and VFR flights are permitted and ATC separation is provided to all aircraft. Class B low level controlled airspace is all airspace above 12 500 ft ASL, or at and above the minimum en-route altitude (MEA), whichever is higher, up to, but not including, 18 000 ft ASL. Terminal control areas (TCA) and associated primary control zones may also be classified as Class B airspace.

(c) Class C airspace

Controlled airspace within which both IFR and VFR flights are permitted, but VFR flights require a clearance to enter. ATC separation is provided to all IFR aircraft and, as necessary to resolve possible conflicts, between IFR and VFR aircraft. TCAs and associated primary control zones may be classified as Class C airspace.

(d) Class D airspace

Controlled airspace within which both IFR and VFR flights are permitted, but VFR flights must establish two-way communications with the appropriate ATC agency prior to entering the airspace. ATC separation is provided only to IFR aircraft. TCAs and associated primary control zones may be classified as Class D airspace.

(e) Class E airspace

Controlled airspace within which both IFR and VFR flights are permitted, but VFR flights do not have to establish two-way communications with the appropriate ATC agency prior to entering the airspace. ATC separation is provided only to IFR aircraft. All high level controlled airspace above FL 600 within the SCA, NCA and ACA is Class E airspace. Also, low level airways, low level fixed area navigation (RNAV) routes, control area extensions, transition areas, or control zones established without an operating control tower may be classified as Class E airspace.

(f) Class F airspace

Special-use airspace that may be a restricted area, an advisory area, military operations areas or danger areas and can be controlled airspace, uncontrolled airspace or a combination of both. It is described in terms of horizontal and vertical dimensions, effective for a specified period of time.

Although both IFR and VFR flights are permitted in Class F airspace, restricted-airspace access is not authorized without the approval of the user/controlling agency, and advisory-area access is normally reserved for participating aircraft. Non-participating flights should avoid flight within advisory areas, and ATC will not clear non-participating IFR aircraft into an active advisory area. Rules for special-use airspace are as specified in the DAH, and, if not specified, or when the area is not active, the appropriate rules for the surrounding airspace apply.

(g) **Class G airspace**

Airspace within which IFR and VFR flights are not subject to control. Airspace shall be classified as Class G if it has not been designated as A, B, C, D, E or F.

Note: A poster entitled “Canada’s Airspace” (TP 6010) provides a graphic presentation of airspace structure.

Fr: classification de l’espace aérien

airspace structure

The structure that defines the physical dimensions of the elements into which the airspace is divided, such as control zones (CZ), terminal control areas (TCA), control area extensions (CAE) and airways. The dimensions of airspace structure elements are described in the *Designated Airspace Handbook* (DAH).

Note: A poster entitled “Canada’s Airspace” (TP 6010) provides a graphic representation of airspace structure.

Fr: structure de l’espace aérien

airspeed

Other expression for: **indicated airspeed** (IAS)

airstart

The starting of an aircraft engine while the aircraft is airborne.

Fr: démarrage en vol

air taxi

U.S. and Canada: The movement of a helicopter or vertical takeoff and landing aircraft (VTOL) above the surface of an aerodrome but normally not above 100 ft AGL. The aircraft may proceed via flight at airspeeds of more than 20 kt.

- see also: **hover taxi**

Note: One of the two terms encompassed by ICAO’s term **air-taxiing**

Fr: circulation en vol

air-taxiing

ICAO: Movement of a helicopter/VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kt).

Note ICAO: The actual height may vary, and some helicopters may require air-taxiing above 8 m (25 ft) AGL to reduce ground effect turbulence or provide clearance for cargo slingloads.

- see also: **air taxi** and **hover taxi**

Note: ICAO generic term that covers both **air taxi** and **hover taxi**, as used in North America.

Fr: circulation en vol rasant

air traffic

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

Fr: circulation aérienne

air traffic advisory service

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

- see also: **air traffic advisory services**

Fr: service consultatif de la circulation aérienne

air traffic advisory services

Services provided by an air traffic control unit or a flight service station that consist in the dissemination of aeronautical safety information, including aviation weather information and serviceability reports in respect of aerodromes and radio navigation aids, but that exclude the provision of IFR air traffic control messages.

- see also: **air traffic advisory service**

Fr: services consultatifs de la circulation aérienne

air traffic clearance

Other expression for: **air traffic control clearance**

air traffic control clearance

An authorization issued by an ATC unit for an aircraft to proceed within controlled airspace in accordance with the conditions specified by that unit.

- also called: air traffic clearance, ATC clearance and clearance

Fr: autorisation du contrôle de la circulation aérienne

air traffic control instruction

A directive issued by an ATC unit for ATC purposes.

Fr: instructions du contrôle de la circulation aérienne

air traffic controller

A person holding a valid licence to control air traffic.

- also called: controller

Fr: contrôleur de la circulation aérienne

air traffic control operations support specialist

An employee assigned to perform non-control functions in an ATC unit.

- also called: operations support specialist (OSS)

Fr: spécialiste technique d'exploitation du contrôle de la circulation aérienne

air traffic control service

A service provided for the purposes of

- (a) preventing collisions between
 - (i) aircraft;
 - (ii) aircraft and obstacles; and
 - (iii) aircraft and vehicles on the manoeuvring area; and
- (b) expediting and maintaining an orderly flow of air traffic.

- also called: ATC service

Fr: service de contrôle de la circulation aérienne

air traffic control specialist

U.S.: Expression for: **air traffic controller**

- abbreviation: ATCS

air traffic control unit

As the circumstances require, this may be

- (a) an area control centre (ACC) established to provide ATC service to aircraft; or
- (b) an airport control tower unit established to provide ATC service to airport traffic.

- also called: ATC unit

Fr: unité de contrôle de la circulation aérienne

air traffic flow management

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

- abbreviation: ATFM

Fr: gestion du débit de la circulation aérienne

air traffic management

A management concept aimed at ensuring full utilization of ATC systems, according to the possibilities offered by future air navigation systems, as they evolve, from both a national and an international perspective.

- abbreviation: ATM

Fr: gestion de la circulation aérienne

air traffic service

A service that includes ATC service, flight services and alerting service.

- abbreviation: ATS

Fr: service de la circulation aérienne

airway

The controlled airspace within the boundaries or along the tracks specified in the *Designated Airspace Handbook* (DAH).

- abbreviation: AWY

Fr: voie aérienne

airway beacon

U.S.: A beacon used to mark airway segments in remote mountain areas. The light flashes Morse Code to identify the beacon site.

AIS

Abbreviation for: **aeronautical information service**

Fr: AIS

ALERFA

ICAO: Abbreviation for: **alert phase**

Fr: ALERFA

alerting service

A service provided by ATS units to notify appropriate organizations regarding aircraft in need of search and rescue (SAR) aid and to assist such organizations as required. This service also includes the alerting of crash equipment, ambulances, doctors, and any other safety services.

Fr: service d'alerte

alert notice

A message requesting that communications search be expanded to all potential landing sites in the defined search area.

- abbreviation: ALNOT

Fr: avis d'alerte

alert phase

(1) A phase that begins when

- (a) following the uncertainty phase, the communication search has failed to reveal any news of the aircraft;
- (b) an aircraft has been cleared to land and fails to land within 5 min after the estimated time of landing and communication has not been re-established with the aircraft; or
- (c) information has been received that indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely.

- see also: **emergency phase**

Fr: phase d'alerte

(2) ICAO: A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

- abbreviation: ALERFA

- see also: **emergency phase**

Fr: phase d'alerte

ALNOT

Abbreviation for: **alert notice**
Fr: ALNOT

ALR

Canada: Abbreviation for: **aircraft load rating**
Fr: ALR

ALRS

ICAO: Abbreviation for: **alerting service**
Fr: ALRS

ALT

Abbreviation for: **altitude**
Fr: ALT

alternate aerodrome

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

- (a) **takeoff alternate aerodrome**
- (b) **en-route alternate aerodrome**
- (c) **destination alternate aerodrome**

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

Fr: a rodrome de d gagement

altimeter setting

The barometric pressure reading used to adjust a pressure altimeter for variations in existing atmospheric pressure or to the standard altimeter setting (29.92 in. of mercury).

Fr: calage altim trique

altimeter setting region

(1) All low level airspace (LLA) within the Southern Domestic Airspace (SDA).

Fr: r gion de calage altim trique

(2) DND: A designated area within which aircraft shall use the altimeter setting of the nearest station along the route of flight.

Fr: r gion de calage altim trique

altitude

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

- abbreviation: ALT

Fr: altitude

(2) Other expression for: **indicated altitude**

altitude above ground level

The altitude expressed in feet measured above ground level.

Fr: altitude au-dessus du sol

altitude above sea level

The altitude expressed in feet measured above sea level.

Fr: altitude au-dessus du niveau de la mer

altitude readout

Altitude information displayed in a digital target tag, a hold list or a suspend list.

Fr: affichage d'altitude

altitude readout value

The altitude figures currently displayed in an altitude readout.

Fr: chiffres d'affichage d'altitude

altitude reservation

An airspace of defined dimensions within controlled airspace, reserved for the use of a civil or military agency during a specified period. An altitude reservation may be confined to a fixed area (stationary) or moving in relation to the aircraft that operate within it (moving).

- abbreviation: ALTRV

Fr: réservation d'altitude

altitude reservation service

The service provided by the altitude reservation East (Gander) and the altitude reservation West (Edmonton) in coordination with area control centres (ACC) in providing reserved altitude for specified air operations in controlled airspace, and in providing information concerning these reservations and military activity areas in controlled and uncontrolled airspace.

Fr: service de réservation d'altitude

altitude reservation service East

Central coordinating agencies of the NAV CANADA altitude reservation service for eastern Canada.

- abbreviation: ARE

Fr: service de réservation d'altitude est

altitude reservation service West

Central coordinating agencies of the NAV CANADA altitude reservation service for western Canada.

- abbreviation: ARW

Fr: service de réservation d'altitude ouest

altitude reservation specialist

An employee in the area control centre (ACC) assigned responsibility for processing requests for altitude reservations (ALTRV).

Fr: spécialiste de réservation d'altitude

altitude restriction

(1) Canada: A restriction to an altitude or altitudes imposed on a flight to ensure that separation criteria are met.

Fr: restriction d'altitude

(2) U.S.: An altitude or altitudes, stated in the order flown, which are to be maintained until reaching [*sic*] a specific point or time. Altitude restrictions may be issued by ATC due to traffic, terrain, or other airspace considerations.

ALTRV

Abbreviation for: **altitude reservation**

Fr: ALTRV

AMA

Abbreviation for: **area minimum altitude**

Fr: AMA

AMIS

Abbreviation for: **aircraft movement information service**

Fr: AMIS

AMIS section

A section established within an area control centre (ACC) to provide aircraft movement information service (AMIS) to air defence units.

Fr: section AMIS

AMS

Abbreviation for: **aeronautical mobile service**
Fr: AMS

AMSCR

Abbreviation for: **Aircraft Movement Surface Condition Report**
Fr: AMSCR

AOR

Abbreviation for: **area of responsibility**
Fr: AOR

APAPI

Abbreviation for: **abbreviated precision approach path indicator**
Fr: APAPI

APP

ICAO: Abbreviation for: **approach control service**
Fr: APP

approach clearance

An authorization issued by ATC for a pilot to conduct an instrument approach procedure (IAP). The type of IAP, along with other pertinent information, is provided in the approach clearance when required.
Fr: autorisation d'approche

approach control facility

U.S.: A terminal ATC facility that provides approach control service in a terminal area.

approach control service

(1) ICAO: Air traffic control service for arriving or departing controlled flights.

- abbreviation: APP

- see also: **terminal control service**

Fr: service du contrôle d'approche

(2) U.S.: ATC service provided by an approach control facility for arriving and departing VFR/IFR aircraft and, on occasion, en-route aircraft. At some airports not served by an approach control facility, the air route traffic control center (ARTCC) provides limited approach control service.

- see also: **terminal control service**

approach gate

U.S.: Expression for: **final approach gate**

approach lights

Lights indicating a desired line of approach to a landing area.
Fr: feux d'approche

approach mode

Other expression for: **final approach mode**

approach procedure with vertical guidance

An instrument approach procedure that utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.

- abbreviation: APV

- also called: approach with vertical guidance

- see also: **barometric vertical navigation** (baro-VNAV), **lateral navigation** (LNAV), **localizer performance with vertical guidance** (LPV), **localizer performance without vertical guidance** (LP), and **vertical navigation** (VNAV)

Fr: procédure d'approche avec guidage vertical

approach sequence

The order in which two or more aircraft are cleared to approach to land at an aerodrome.

Fr: séquence d'approche

approach speed

The recommended speed provided in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration.

Fr: vitesse d'approche

approach UNICOM

An air-ground communications service that can provide approach and landing information to IFR pilots.

- abbreviation: AU

Fr: station UNICOM d'approche

approach with vertical guidance

Other expression for: **approach procedure with vertical guidance** (APV)

approval request

A request that must be made by all aircraft intending flight to a destination airport where flow control restrictions are in effect.

- abbreviation: APREQ

Fr: demande d'approbation

“Approved”

An expression used in radiotelecommunication meaning “Permission for proposed action granted.”

Fr: « Approuvé »

APREQ

Abbreviation for: **approval request**

Fr: APREQ

apron

That part of an aerodrome, other than the manoeuvring area, intended to accommodate the loading and unloading of passengers and cargo; the refuelling, servicing, maintenance and parking of aircraft; and any movement of aircraft, vehicles and pedestrians engaged in services necessary for such purposes.

- also called: flight line, ramp and tarmac

Fr: aire de trafic

apron advisory

Other expression for: **apron management service**

apron control

Other expression for: **apron management service**

apron management service

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

- also called: apron control and apron advisory

Fr: service de gestion d'aire de trafic

apron traffic

All aircraft, vehicles, equipment and pedestrians using the apron of the aerodrome.

Fr: circulation d'aire de trafic

APRT

Abbreviation for: **airport**

Fr: APRT

APV

Abbreviation for: **approach procedure with vertical guidance**

Fr: APV

arc

The track over the ground of an aircraft flying at a constant distance from a NAVAID by reference to distance measuring equipment (DME).

Fr: arc

ARC

Abbreviation for: **automatic radio compass**

- see: **automatic direction finder (ADF)**

Fr: ARC

ARCAL

Abbreviation for: **aircraft radio control of aerodrome lighting**

Fr: ARCAL

ARCP

Abbreviation for: **air refuelling control point**

Fr: ARCP

Arctic Control Area

A controlled airspace within the Northern Domestic Airspace (NDA) at FL 270 and above.

- abbreviation: ACA

Fr: région de contrôle de l'Arctique

ARE

Abbreviation for: **altitude reservation service East**

Fr: ARE

area control centre

An ATC unit that provides ATC service to aircraft operating within a flight information region (FIR).

- abbreviation: ACC
- see also: **air route traffic control center (ARTCC)**

Fr: centre de contrôle régional

area controller

A duty controller assigned to a control position in an area control centre (ACC).

Fr: contrôleur régional

area control service

The control service provided by an area control centre (ACC) to IFR and CVFR aircraft operating within specified control areas.

Fr: service de contrôle régional

area minimum altitude

The lowest altitude that may be used under instrument meteorological conditions (IMC) that will provide a minimum vertical clearance of 1000 ft or, in a designated mountainous region, 2000 ft, rounded up to the next 100-ft increment, under conditions of standard temperature and pressure, above all obstacles located in the area specified.

- abbreviation : AMA

Note: This term replaced the term **geographic area safe altitude (GASA)** on April 18, 2002.

Fr: altitude minimale de zone

area navigation

A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based NAVAIDs or within the limits of the capability of self-contained aids, or a combination of these.

- abbreviation: RNAV

Fr: navigation de surface

area of responsibility

(1) A geographical area within which alerting service is provided by an ATS unit designated as the responsible unit.

- abbreviation: AOR

Fr: zone de responsabilité

(2) In the world area forecast system, a geographical area for which a regional area forecast centre prepares significant weather forecasts.

Fr: zone de responsabilité

ARIP

Abbreviation for: **air refuelling initial point**

Fr: ARIP

ARO

U.S.: Abbreviation for: **Airport Reservation Office**

ARP

Abbreviation for: **aerodrome reference point**

Fr: ARP

arrival aircraft interval

U.S.: Expression for: **average arrival interval**

arrival control

A function of an approach control facility providing ATC service for arriving IFR and, under certain conditions, VFR aircraft.

Fr: contrôle des arrivées

arrival controller

A duty controller assigned to an arrival control position.

Fr: contrôleur des arrivées

arrival report

A report submitted by a pilot that contains specific information concerning the arrival of an aircraft and that is forwarded, in the case of a flight plan (FP), to the ATS unit that has been assigned alerting service responsibility or, in the case of a flight itinerary (FI), to the ATS unit that has been assigned alerting service responsibility or to the responsible person with whom the itinerary was filed.

Fr: compte rendu d'arrivée

arrival time

The time that an aircraft touches down on arrival.

Fr: heure d'arrivée

ARS

Abbreviation for: **special air-report**

Fr: ARS

ARSA

U.S.: Abbreviation for: **Airport Radar Service Area**

ARSR

U.S.: Abbreviation for: **air route surveillance radar**

ARTCC

U.S.: Abbreviation for: **air route traffic control center**

ARTS

U.S.: Abbreviation for: **automated radar terminal systems**

ARW

Abbreviation for: **altitude reservation service West**

Fr: ARW

ASDE

Abbreviation for: **airport surface detection equipment**

Fr: ASDE

ASL

Abbreviation for: **above sea level**

- see: **altitude above sea level**

Fr: ASL

assigned arrival time

The arrival time assigned to an aircraft landing at a specific airport that is based on the area control centre's (ACC) estimates and recalculated to resolve simultaneous demands at the airport.

- abbreviation: AAT

Fr: heure d'arrivée assignée

assigned departure time

The departure time assigned to an aircraft, derived from its estimated time en route, that enables compliance with an issued arrival time at the destination airport.

- abbreviation: ADT

Fr: heure de départ assignée

asynchronous balanced mode

ICAO: A balanced operational mode in which a data link connection has been established between two service access points. Either data link entity can send commands at any time and initiate responses without receiving permission from the peer data link entity on the connection.

- abbreviation: ABM

Fr: mode équilibré asynchrone

ATCAA

Abbreviation for: **ATC-assigned airspace**

Fr: ATCAA

ATC-assigned airspace

Airspace of defined vertical and lateral limits assigned by ATC for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

- abbreviation: ATCAA

Fr: espace aérien assigné par l'ATC

ATC clearance

Other expression for: **air traffic control clearance**

“ATC clears”

An expression used to prefix an ATC clearance when it is relayed to an aircraft by someone other than the air traffic controller who issued the clearance. The expression is also used in direct controller-pilot communications (DCPC) to differentiate a clearance from an instruction.

Fr: « ATC autorise »

ATC Contingency Command Post

U.S.: A facility which enables the Federal Aviation Administration (FAA) to manage the ATC system when significant portions of the system’s capabilities have been lost or are threatened.

“ATC requests”

An expression used to prefix an ATC request when it is relayed to an aircraft by someone other than the air traffic controller who made the request.

Fr: « ATC demande »

ATCS

U.S.: Abbreviation for: **air traffic control specialist**

- see: **air traffic controller**

ATC service

Other expression for: **air traffic control service**

ATC unit

Other expression for: **air traffic control unit**

ATF

Abbreviation for: **aerodrome traffic frequency**

Fr: ATF

ATFM

Abbreviation for: **air traffic flow management**

Fr: ATFM

ATIS

Abbreviation for: **automatic terminal information service**

Fr: ATIS

ATM

Abbreviation for: **air traffic management**

Fr: ATM

“... at pilot’s discretion”

(1) Canada: When used in conjunction with an aircraft operation on the airport apron or other surface, that is not under the control of ATC, means that it is the responsibility of the pilot to ensure that the operation is carried out safely with respect to traffic or other hazards that might be encountered during the operation.

Fr: « ... à la discrétion du pilote »

(2) U.S.: When used in conjunction with altitude assignments, an expression meaning that ATC has offered the pilot the option of starting the climb or descent whenever the pilot wishes and conducting the climb or descent at any rate the pilot wishes. The pilot may temporarily level off at any intermediate altitude. However, once the pilot has vacated an altitude, the pilot may not return to that altitude.

- see also: **“When ready . . .”**

ATS

Abbreviation for: **air traffic service**

Fr: ATS

ATS interfacility data communication

Automated data exchange between air traffic service units, particularly in regard to coordination and transfer of flights.

- abbreviation: AIDC

Fr: communications de données entre installations ATS

ATS OI

Abbreviation for: **ATS operating irregularity**

Fr: IE ATS

ATS operating irregularity

A situation that occurs when ATS are being provided and when a preliminary investigation indicates that a hazardous situation or loss of separation may have occurred.

- abbreviation: ATS OI
- also called: operating irregularity

Fr: irrégularité d'exploitation ATS

ATS surveillance

All methods of remotely sensing aircraft using certified/commissioned electronic equipment, including PSR, SSR, MLAT, and ADS-B, without the benefit of visual observation.

- see also: **ATS surveillance system** and **ATS surveillance service**

Fr: surveillance ATS

ATS surveillance service

A service provided directly by means of an ATS surveillance system.

- see also: **ATS surveillance** and **ATS surveillance system**

Fr: service de surveillance ATS

ATS surveillance system

ADS-B, PSR, SSR or any comparable ground-or space-based system that enables the identification of aircraft.

- see also: **ATS surveillance** and **ATS surveillance service**

Fr: système de surveillance ATS

AU

Abbreviation for: **approach UNICOM**

Fr: AU

auto

Spoken expression for: **autorotation**

automated radar terminal systems

U.S.: The generic expression for the ultimate in functional capability afforded by several automation systems. Each differs in functional capabilities and equipment.

- abbreviation: ARTS

automated weather observation system

A set of meteorological sensors and associated systems designed to electronically collect and disseminate meteorological data.

- abbreviation: AWOS

Fr: système automatisé d'observations météorologiques

automatically deployable ELT

An ELT that is rigidly attached to an aircraft and deployed automatically in response to a crash. Manual deployment is also provided.

- abbreviation: ELT(AD)
- see also: **emergency locator transmitter (ELT)**

Fr: ELT automatique largable

automatic altitude reporting

The function of a transponder that responds to Mode C interrogations by transmitting the aircraft's altitude in 100-ft increments.

Fr: transmission automatique d'altitude

automatic dependent surveillance

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

- abbreviation: ADS
- see also: **automatic dependent surveillance - broadcast (ADS-B)** and **automatic dependent surveillance - contract (ADS-C or ADS-contract)**

Fr: surveillance dépendante automatique

automatic dependent surveillance - broadcast

A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

- abbreviation: ADS-B
- see also: **automatic dependent surveillance (ADS)** and **automatic dependent surveillance - contract (ADS-C or ADS-contract)**

Fr: surveillance dépendante automatique en mode diffusion

automatic dependent surveillance - contract

A means by which a ground system and an aircraft can automatically transmit and/or receive position reports via data link on the basis of a contract defined by the ATS unit.

- abbreviations: ADS-C or ADS-contract
- see also: **automatic dependent surveillance (ADS)** and **automatic dependent surveillance - broadcast (ADS-B)**

Note: There are three types of ADS-C:

- (a) periodic (the aircraft system sends an ADS-C report at timed intervals);
- (b) demand (the aircraft system sends a single ADS-C periodic report); and
- (c) event (the aircraft system sends an ADS-C report that is triggered by a particular event such as a waypoint change event).

Fr: surveillance dépendante automatique en mode contrat

automatic direction finder

An aircraft radio navigation system that senses and indicates the direction to a LF/MF non-directional beacon (NDB) ground transmitter. Direction is indicated to the pilot as a magnetic bearing or as a relative bearing to the longitudinal axis of the aircraft depending on the type of indicator installed in the aircraft. In certain applications, such as military, ADF operations may be based on airborne and ground transmitters in the VHF/UHF spectrum.

- abbreviation: ADF
- also called: automatic radio compass (ARC) and automatic direction-finding equipment

Fr: radiogoniomètre automatique

automatic direction-finding equipment

Other expression for: **automatic direction finder (ADF)**

- abbreviation: ADF

automatic fixed ELT

An ELT that is permanently attached to an aircraft.

- abbreviation: ELT(AF)
- see also: **emergency locator transmitter (ELT)**

Fr: ELT automatique fixe

automatic portable ELT

An ELT that is rigidly attached to an aircraft but readily removable from the aircraft after a crash.

- abbreviation: ELT(AP)
- see also: **emergency locator transmitter (ELT)**

Fr: ELT automatique portative

automatic radio compass

Other expression for: **automatic direction finder (ADF)**

- abbreviation: ARC

automatic terminal information service

The provision, throughout the day or a specified portion of the day, of current, routine information to arriving and departing aircraft by means of continuous and repetitive recorded broadcasts.

- abbreviation: ATIS

Fr: service automatique d'information de région terminale

autorotation

A rotorcraft flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft is in motion.

- spoken expression: auto

Fr: autorotation

autorotational landing

Other expression for: **autorotation to touchdown**

autorotation to touchdown

An expression used by a helicopter pilot to indicate that he or she will be landing without applying power to the rotor.

- also called: autorotational landing, autorotative landing and touchdown autorotation

Fr: atterrissage en autorotation

autorotative landing

Other expression for: **autorotation to touchdown**

AVASI

U.S. and Canada: Abbreviation for: **abbreviated visual approach slope indicator**

Fr: AVASI

average arrival interval

The average number of minutes of longitudinal spacing required between arriving aircraft landing at an airport, based on the acceptance rate of the runway or runways.

- abbreviation: AAI

Fr: intervalle moyen d'arrivée

aviation occurrence

Any accident or incident associated with the operation of an aircraft, or any situation or condition that could, if left unattended, induce an accident or incident.

Fr: fait aéronautique

aviation routine weather report

Other expression for: **aerodrome routine meteorological report (METAR)**

aviation special weather report

Other expression for: **aerodrome special meteorological report (SPECI)**

aviation weather service

U.S.: A service provided by the National Weather Service (NWS) and the Federal Aviation Administration (FAA) which collects and disseminates pertinent weather information for pilots, aircraft operators, and ATC. Available aviation weather reports and forecasts are displayed at each NWS office and FAA FSS.

AWACS

Abbreviation for: **airborne warning and control system**

Fr: AWACS

AWOS

Abbreviation for: **automated weather observation system**

Fr: AWOS

AWW

U.S.: Abbreviation for: **severe weather forecast alert**

AWY

Abbreviation for: **airway**

Fr: AWY

4.3 – B –

back course sector

The course sector that is situated on the opposite side of the localizer (LOC) antenna from the runway.

- see also: **front course sector**

Fr: secteur d'alignement de piste arrière

backtrack

The taxiing of an aircraft on a runway in use in a direction opposite to the landing or takeoff direction.

Fr: circulation à contresens

ballistic parachute system

An aircraft parachute system that extracts/propels the parachute via an ignitable propellant, e.g.: rocket motor or explosive charge.

- see also: **aircraft parachute system**

Fr: système de parachute balistique

balloon

A non-power-driven lighter-than-air aircraft.

Fr: ballon

bare and damp

With respect to runway surface condition, appearing wet, but where the moisture cannot be readily detected.

- see also: **bare and dry**, **bare and wet**, and **contaminant**

Fr: nue et humide

bare and dry

With respect to runway surface condition, free from moisture, liquid, or any observed contaminant.

- see also: **bare and damp**, **bare and wet**, and **contaminant**

Fr: nue et sèche

bare and wet

With respect to runway surface condition, where there is a thin layer of water and the layer is 3 mm (0.13 inch) or less in depth.

- see also: **bare and damp**, **bare and dry**, and **contaminant**

Fr: nue et mouillée

barometric vertical navigation

- (1) U.S. and Canada: A function of certain RNAV systems that presents to the pilot computed vertical guidance referenced to a specified vertical path, based on barometric altitude information and typically computed as a geometric path between two waypoints or an angle based on a single waypoint.
- (2) ICAO: A navigation system that presents to the pilot computed vertical guidance referenced to a specified vertical path angle (VPA), nominally 3°. The computer-resolved vertical guidance is based on barometric altitude and is specified as a VPA from reference datum height (RDH).
 - abbreviation: baro-VNAV
 - also called: lateral navigation/vertical navigation (LNAV/VNAV)
 - see also: **approach procedure with vertical guidance (APV)**, **lateral navigation (LNAV)**, **localizer performance with vertical guidance (LPV)**, **localizer performance without vertical guidance (LP)**, and **vertical navigation (VNAV)**

Fr: navigation verticale barométrique

barometric VNAV

ICAO: Expression for: **barometric vertical navigation (baro-VNAV)**

baro-VNAV

Abbreviation for: **barometric vertical navigation**

Fr: baro-VNAV

base

Other expression for: **base leg**

basic ultralight aeroplane

An aeroplane having no more than two seats, designed and manufactured to have:

- (a) a maximum takeoff weight not exceeding 544 kg (1200 lb); and
- (b) a stall speed in the landing configuration (V_{so}) of 39 kt indicated airspeed, or less, at the maximum takeoff weight.

- abbreviation: BULA
- see also: **advanced ultralight aeroplane**

Fr: avion ultra-léger de base

base leg

A flight path extending from the end of the downwind leg to the extended centreline of the approach end of the landing runway (or landing path).

- also called: base
- Fr: étape de base*

BCST

Abbreviation for: **broadcast**

Fr: BCST

beacon

An aeronautical light arranged, either through optical design or mechanical motion, to be visible to all azimuths, either continuously or consecutively, to designate a particular point on the surface of the earth.

- also called: aeronautical beacon
- Fr: phare*

bearing

The horizontal direction to or from any point, usually measured clockwise from true north, magnetic north or some other reference point, through 360°.

- abbreviation: BRG
- Fr: relèvement*

bedpost

Other expression for: **terminal area entry fix**

below minimums

An expression indicating that the weather conditions are below the minimums prescribed by regulation.

Fr: en dessous des minimums

beyond visual line of sight

Further than can be perceived by direct visual contact, thereby requiring technological support.

- abbreviation: BVLOS
- see also: **model aircraft**, **remotely piloted aircraft (RPA)**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft (UA)**, **unmanned aircraft system (UAS)**, **unmanned air vehicle (UAV)**, and **visual line of sight (VLOS)**

Fr: au-delà de la visibilité directe

bird hazard

- see: **wildlife hazard**

Fr: péril aviaire

bird strike

- see: **wildlife strike**
- Fr: impact d'oiseau*

blast fence

A barrier used to divert or dissipate jet or propeller blast.

Fr: écran anti-souffle

blind spot

Other expression for: **blind zone**

blind transmission

A transmission from one station to another in circumstances where two-way communication cannot be established but where it is believed that the called station is able to receive the transmission.

- see also: **“Transmitting (in the) blind”**
- Fr: transmission sans accusé de réception*

blind zone

An area from which radio transmissions or radar echoes cannot be received. The expression is also used to describe portions of the airport not visible from the control tower.

- also called: blind spot
- Fr: angle mort de couverture*

blowing snow

Snow that is raised approximately 7 ft or more above ground.

Fr: chasse-neige élevée

braking action

Other expression for: **braking action report**

braking action report

A report of conditions on the airport movement area that provides a pilot with an idea of the degree or quality of braking that the pilot might expect (good, fair, poor, or nil).

- also called: braking action
- Fr: rapport de freinage*

“Break”

(1) An expression used in radiocommunication meaning “I hereby indicate the separation between portions of the message.”

Note: To be used where there is no clear distinction between the various portions of the message.

Fr: « Break »

(2) DND: An expression used in radiocommunications to instruct a pilot to execute a rapid level turn.

- see also: **overhead break**
- Fr: « Virez »*

“Break break”

An expression used in radiocommunication meaning “I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment.”

- see also: **“Break”**
- Fr: « Break break »*

BRG

Abbreviation for: **bearing**

Fr: BRG

broadcast

A transmission of information relating to air navigation that is not addressed to a specific station or stations.

- abbreviation: BCST

Fr: diffusion

BVLOS

Abbreviation for: **beyond visual line of sight**

Fr: BVLOS

4.4 – C –

CA

Abbreviation for: **conflict alert**

Fr: CA

CAE

Abbreviation for: **control area extension**

Fr: CAE

Canada Air Pilot

A document in which the Minister may establish standard procedures for air operations at specific aerodromes.

- abbreviation: CAP

Fr: *Canada Air Pilot*

Canada Flight Supplement

A joint civil/military publication, containing information on aerodromes, that is used as a reference for the planning and safe conduct of air operations. This document is issued every 56 days.

- abbreviation: CFS
- see also: **Chart Supplement U.S.**

Fr: *Supplément de vol — Canada*

Canada Water Aerodrome Supplement

A joint civil/military publication concerning water aerodromes that is intended to be used to supplement en-route charts and the *Canada Air Pilot* (CAP). This document is issued once a year.

- abbreviation: CWAS
- see also: **Chart Supplement U.S.**

Fr: *Supplément hydroaérodromes — Canada*

Canadian aircraft

An aircraft registered in Canada.

Fr: *aéronef canadien*

Canadian aviation document

Any licence, permit, accreditation, certificate or other document issued by the Minister under Part I of the *Aeronautics Act* to or with respect to any person, or in respect of any aeronautical product, aerodrome, facility or service.

Fr: *document d'aviation canadien*

Canadian Aviation Regulations

The rules, enacted under the *Aeronautics Act*, that govern civil aviation in Canada. Replacing the *Air Regulations* and the *Air Navigation Orders*, the CARs and their associated standards came into force on October 10, 1996, after a comprehensive consultation process between Transport Canada and the aviation community. This co-operative and partnership approach to rule-making continues within the Canadian Aviation Regulation Advisory Council (CARAC), which discusses proposed amendments to the CARs and their associated standards.

- abbreviation: CARs

Fr: *Règlement de l'aviation canadien*

Canadian Domestic Airspace

As geographically delineated in the *Designated Airspace Handbook* (DAH), all airspace over the Canadian land mass, the Canadian Arctic and the Canadian archipelago, and over areas of the high seas.

- abbreviation: CDA

Fr: *espace aérien intérieur canadien*

Canadian minimum navigation performance specifications

Specifications relating to the navigation performance capability of aircraft operating in a specified portion of the Canadian Domestic Airspace (CDA). To comply with CMNPS, navigation performance must be such that:

- (a) the standard deviation of lateral track deviations is less than 6.3 NM;
- (b) the proportion of total flight time spent by aircraft 30 NM or more off the cleared track is less than 5.3×10^{-4} (i.e. less than 1 hr in about 2000 flight hours); and
- (c) the proportion of total flight time spent by aircraft at or between 50 and 70 NM off the cleared track is less than 13×10^{-5} (i.e. less than 1 hr in about 8000 flight hours).

- abbreviation: CMNPS

Fr: spécifications canadiennes de performances minimales de navigation

Canadian Runway Friction Index

The average of the runway friction as measured by a mechanical or electronic decelerometer and reported through the Aircraft Movement Surface Condition Report (AMSCR).

- abbreviation: CRFI
- also called: CRFI reading
- see also: **Aircraft Movement Surface Condition Report (AMSCR)**

Fr: coefficient canadien de frottement sur piste

“Cancelling IFR”

Canada: An expression used by a pilot, when flying on an IFR flight plan (FP) or flight itinerary (FI), to change flight rules from IFR to VFR. As a result, ATC will discontinue providing IFR separation, but will not close the IFR FP or FI or open a VFR FP or FI.

- see also: **“Cancel my IFR flight plan”**

Fr: « J'annule IFR »

“Cancel my IFR flight plan”

U.S.: An expression used by a pilot when flying on an IFR flight plan (FP) in the U.S. or landing at a Canadian airport that underlies airspace delegated to the control of the FAA, to discontinue providing IFR separation and close the FP.

- see also: **“Cancelling IFR”**

CAP

Abbreviation for: **Canada Air Pilot**

Fr: CAP

CARF

U.S.: Abbreviation for: **Central Altitude Reservation Function**

- see: **altitude reservation service**

CARs

Abbreviation for: **Canadian Aviation Regulations**

Note: This abbreviation is not to be confused with “CARS.”

Fr: RAC

CARS

Abbreviation for: **community aerodrome radio station**

Note: This abbreviation is not to be confused with “CARs.”

Fr: CARS

CAT

Abbreviation for: **clear air turbulence**

Fr: CAT

cautionary

With respect to wake turbulence, information transmitted to an aircraft on one of the following:

- (a) the possible location of wake turbulence; or
- (b) the location of a heavy or medium aircraft behind which it will pass or follow.

Fr: avertissement

CAVOK

A term (pronounced “KAV-OH-KAY”), derived from the words “ceiling and visibility OK,” that may be used in air-ground communication when meteorological information is being transmitted to aircraft. CAVOK refers to the simultaneous occurrence, at an airport, of the following meteorological conditions:

- (a) no cloud below 5000 ft, or below the highest minimum sector altitude (MSA), whichever is higher, and no cumulonimbus;
- (b) a visibility of 6 SM or more; and
- (c) no precipitation, thunderstorm, shallow fog or drifting snow.

Fr: CAVOK

CDA

- (1) Abbreviation for: **Canadian Domestic Airspace**

Fr: CDA

- (2) Abbreviation for: **departure clearance readback**

Fr: CDA

CDFA

Abbreviation for: **continuous descent final approach**

Fr: CDFA

ceiling

- (1) Canada: The lesser of:
 - (a) the height above ground or water of the base of the lowest layer of cloud covering more than half the sky; or
 - (b) the vertical visibility in a surface-based layer which completely obscures the sky.

Fr: plafond

- (2) ICAO: The height above the ground or water of the base of the lowest layer of cloud below 6000 m (20 000 ft) covering more than half the sky.

Fr: plafond

- (3) U.S.: The heights above the earth’s surface of the lowest layer of clouds or obscuring phenomena that is reported as “broken,” “overcast,” or “obscuration,” and not classified as “thin” or “partial.”

Center Weather Advisory

U.S.: An unscheduled weather advisory issued by Center Weather Service Unit meteorologists for ATC use to alert pilots of existing or anticipated adverse weather conditions within the next 2 hours. A CWA may modify or redefine a SIGMET.

- abbreviation: CWA

Central Altitude Reservation Function

U.S.: Expression for: **altitude reservation service**

- abbreviation: CARF

Central Flow Control Function

U.S.: Unit that is responsible for coordination and approval of all major intercenter [*sic*] flow control restrictions on a system basis in order to obtain maximum utilization of the airspace.

- abbreviation: CFCF

centreline fix

Other expression for: **final approach course fix (FACF)**

CFA

Abbreviation for: **common frequency area**

Fr: CFA

CFCF

U.S.: Abbreviation for: **Central Flow Control Function**

CFIT

Abbreviation for: **controlled flight into terrain**

Fr: CFIT

CFS

Abbreviation for: **Canada Flight Supplement**

Fr: CFS

CH

Abbreviation for: **channel**

Fr: CH

chaff

Radar confusion reflectors, which consist of thin, narrow metallic strips of various lengths and frequency responses, used to reflect echoes for confusion purposes.

Fr: plaquettes de brouillage

“Chaff burst”

An expression used in radiocommunication to inform ATC of chaff drops at intervals short enough to appear on radar displays as an individual target.

Fr: « Chaff burst »

change-over point

A point along the route or airway segment between two adjacent navigation facilities where the change-over in navigation guidance should occur.

- abbreviation: COP
- also called: navigation change-over point

Fr: point de changement

channel

A single means of direct fixed-service communication between two points.

- abbreviation: CH

Fr: canal

charted visual approach

An approach wherein a radar-controlled aircraft on an IFR flight plan (FP), operating in VFR conditions and having an ATC authorization, may proceed to the airport of intended landing via visual landmarks and altitudes depicted on a published visual approach chart.

- abbreviation: CVA

Fr: approche visuelle publiée

charted visual flight procedure approach

U.S.: Expression for: **charted visual approach (CVA)**

- abbreviation: CVFP

Chart Supplement U.S.

U.S.: A publication designed primarily as a pilot's operational manual containing all airports, seaplane bases, and heliports open to the public including communications data, navigational facilities, and certain special notices and procedures. This publication is issued in seven volumes according to geographical area.

Note: The equivalent Canadian publications are:

- (a) the **Canada Flight Supplement (CFS)**;
- (b) the **Canada Water Aerodrome Supplement (CWAS)**.

Note: This publication was previously known as the *Airport/Facility Directory (A/FD)*.

chase

Other expression for: **chase aircraft**

chase aircraft

An aircraft flown in proximity to another aircraft, normally to observe its performance during training or testing.

- also called: chase

Fr: aéronef d'observation

chop

A type of turbulence whose intensity is reported by pilots as follows:

- (a) light, when it causes slight, rapid and somewhat rhythmic bumpiness without appreciable changes in altitude or attitude; or
- (b) moderate, when it causes rapid bumps or jolts without appreciable changes in altitude or attitude.

- see also: **turbulence**

Fr: secousses

circle-to-land maneuver

U.S.: Expression for: **circling procedure**

circling approach

ICAO: An extension of an instrument approach procedure which provides for visual circling of the aerodrome prior to landing.

- see also: **circling procedure**

Fr: approche indirecte

circling approach procedure

Other expression for: **circling procedure**

circling maneuver

U.S.: Other expression for: **circling procedure**

circling manoeuvre

Other expression for: **circling procedure**

circling minimums

The minimum descent altitude (MDA) and visibility required for the circling procedure.

Fr: minimums d'approche indirecte

circling procedure

A manoeuvre initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or is not desirable.

Note: After verifying with ICAO and FAA, NAV CANADA removed the term *procedure* from the circling procedure phraseology.

- also called: circling approach procedure, circling manoeuvre

- see also: **circling approach**

Fr: procédure d'approche indirecte

circuit

(1) A communication system that includes all the direct system channels between two points.

Fr: circuit

(2) Other expression for: **aerodrome traffic circuit**

CIRVIS

A plan developed for the reporting of vital intelligence sightings to extend the early-warning coverage of the North American continent.

Note: This term is derived from the words “Communication Instructions for Reporting Vital Intelligence Sightings.”

Fr: CIRVIS

CLA

Abbreviation for: **clearance acknowledgement**

Fr: CLA

Class A, B, C, D, E, F or G airspace

- see: **airspace classification**

Fr: espace aérien de classe A, B, C, D, E, F ou G

CLD

Abbreviation for: **departure clearance message**

Fr: CLD

clear air turbulence

Turbulence encountered in air where no clouds are present. This expression is commonly applied to high-level turbulence associated with wind shear (WS). CAT is often encountered in the vicinity of the jet stream.

- abbreviation: CAT

Fr: turbulence en air clair

clearance

Other expression for: **air traffic control clearance**

clearance acknowledgement

A notification sent by data link by the flight crew to indicate acceptance of a data link oceanic clearance.

- abbreviation: CLA

- see also: **oceanic clearance delivery (OCD)** and **request for clearance (RCL)**

Fr: accusé de réception d'autorisation

“Clearance cancelled . . .”

An expression used in radiocommunication to indicate a time specified by an ATC unit at which a clearance ceases to be valid unless the aircraft concerned has already taken action to comply therewith.

Note: This expression is used in conjunction with a time.

Fr: « Autorisation annulée... »

clearance limit

The point to which an aircraft is granted an ATC clearance.

Fr: limite d'autorisation

“Clearance valid . . .”

An expression used in radiocommunication to indicate a departure time restriction issued to a pilot by ATC (either directly or through an authorized relay) when it is necessary to separate a departing aircraft from other traffic.

Note: This expression is used in conjunction with a time.

Fr: « Autorisation valide à... »

“Clearance void . . .”

ICAO and U.S.: Expression for: **“Clearance cancelled . . .”**

“Cleared as filed”

Other expression for: **“Cleared via flight-planned route”**

“Cleared for takeoff”

An expression used to indicate ATC authorization for an aircraft to depart. It is predicated on known aircraft and known physical airport conditions.

Fr: « Autorisé à décoller »

“Cleared for the option”

(1) Canada:

- (a) For an arriving aircraft: An expression used to indicate ATC authorization for an aircraft to make a touch-and-go, low approach, missed approach (MA), stop-and-go, or full-stop landing, at the discretion of the pilot.
- (b) For a departing aircraft: An expression used to indicate ATC authorization for an aircraft to execute manoeuvres other than a normal takeoff (e.g. an aborted takeoff). After such a manoeuvre, the pilot is expected to exit the runway by the most expeditious way rather than backtrack the runway.

Fr: « Autorisé pour option »

(2) U.S.: For an arriving aircraft: An expression used to indicate ATC authorization for an aircraft to make a touch-and-go, low approach, missed approach, stop-and-go, or full-stop landing, at the discretion of the pilot.

“Cleared through”

U.S.: An expression used to indicate ATC authorization for an aircraft to make intermediate stops at specified airports without refiling a flight plan (FP) while en route to the clearance limit.

“Cleared to land”

An expression used to indicate ATC authorization for an aircraft to land. It is predicated on known aircraft and known physical airport conditions.

Fr: « Autorisé à atterrir »

“Cleared via flight-planned route”

An expression indicating that the aircraft is cleared to proceed in accordance with the route of flight filed in the flight plan (FP). This clearance does not include the altitude, standard instrument departure (SID), or SID transition.

- also called: “Cleared as filed”

Fr: « Autorisé via la route prévue au plan de vol »

“Clear of runway”

In ground control, an expression indicating that a vehicle or an aircraft is at least 200 ft clear of the nearest edge of the runway in use, wherever practicable.

Fr: « À l'écart de la piste »

climbout

Other expression for: **initial climb**

closed runway

A runway that is unusable for aircraft operations. Only airport management or the military operations office can close a runway.

Fr: piste fermée

clutter

In radar operations, the reception and visual display of radar echoes caused by precipitation, chaff, terrain, numerous aircraft, or other phenomena. Such echoes may limit or preclude ATC from providing services based on radar.

Fr: échos indésirables

CMNPS

Abbreviation for: **Canadian minimum navigation performance specifications**

Fr: CMNPS

CMNPSA

Abbreviation for: **CMNPS airspace**

Fr: CMNPSA

CMNPS airspace

As geographically delineated in the *Designated Airspace Handbook* (DAH), designated airspace within the Canadian Domestic Airspace (CDA) in which the conduct of flight is limited to aircraft certified as having Canadian minimum navigation performance specifications (CMNPS) capability, unless the appropriate ATC unit is satisfied that a non-CMNPS-certified aircraft can be accommodated without penalizing CMNPS-certified aircraft.

- abbreviation: CMNPSA

Fr: espace aérien CMNPS

CMNPS transition area

The area within the Canadian Domestic Airspace (CDA) extending upwards from FL 280, underlying the designated CMNPS airspace.

Fr: zone de transition CMNPS

CNS

Abbreviation for: **Communications/Navigation/Surveillance**

Fr: CNS

coastal fix

A NAVAID or position indicating the transition point between the domestic route structure and the oceanic route structure.

Fr: repère côtier

cockpit voice recorder

An aircraft-based system that uses a combination of microphones and other analog and digital devices to record and retain the aural environment of a cockpit as well as communications to, from and between flight crew members.

- abbreviation: CVR
- see also: **flight data recorder** (FDR) and **flight recorder**

Fr: enregistreur de la parole dans le poste de pilotage

command and control link

The data link between a remotely piloted aircraft and a control station, used in the management of a flight.

- also called: C2 link
- see also: **control station**, **flyaway**, **lost link**, **lost-link procedure**, and **remotely piloted aircraft** (RPA)

Fr: liaison de commande et de contrôle

commercial air service

Any use of aircraft for hire or reward.

Fr: service aérien commercial

common frequency area

An area that has a designated frequency published for use by any aircraft.

Note: A CFA is intended to be used for air-to-air communications to provide pilots with an awareness of traffic in their vicinity. It is not a class of airspace and the CFA frequency is not monitored by ATC nor is it for use at uncontrolled aerodromes.

- abbreviation: CFA
- see also: **mandatory frequency area** (MF area)

Fr: zone d'utilisation de fréquence commune

common point

A single fix, whether a NAVAID, a fix derived from NAVAIDs, or geographical coordinates expressed in degrees of latitude and longitude, over which two or more aircraft will pass, or have passed, before proceeding on the same track or diverging tracks.

Fr: point commun

Communications/Navigation/Surveillance

The basic elements of future air navigation systems (FANS).

- abbreviation: CNS

Fr: Communications/Navigation/Surveillance

community aerodrome radio station

An aeronautical radio station established to provide aviation support services at certain isolated aerodromes in the Arctic and northern Quebec, in accordance with the provisions contained in the "Rules of the Air and Air Traffic Services" (RAC) section of the *Transport Canada Aeronautical Information Manual* (TC AIM).

- abbreviation: CARS

Fr: station radio d'aérodrome communautaire

company frequency

An air-ground frequency assigned to an air operator for use by its aircraft or ground stations.

Fr: fréquence de compagnie

compass rose

(1) Canada: A circle, graduated in degrees, used as a reference to true, magnetic or grid direction.

Fr: rose des vents

(2) U.S.: A circle, graduated in degrees, printed on some charts or marked on the ground at an airport. It is used as a reference to either true or magnetic direction.

composite flight plan

A flight plan (FP) that specifies VFR operation for one portion of the flight and IFR for another portion.

Fr: plan de vol composite

composite route system

An organized oceanic route structure that incorporates reduced lateral spacing between routes and in which composite separation is authorized.

Fr: système de routes composites

composite separation

A method of separating aircraft in a composite route system where, through the management of route and altitude assignments, a combination of half the lateral minimum and half the vertical minimum specified for the area concerned is applied.

Fr: espacement composite

compulsory reporting point

A reporting point over which an aircraft must report to ATC. Such points are designated on aeronautical charts by solid triangles or filed in a flight plan (FP) as fixes selected to define direct routes. These points are geographical locations that are defined by NAVAIDs or fixes.

Fr: point de compte rendu obligatoire

conflict

The actual or predicted convergence of aircraft that violates one or more separation minima.

Fr: conflit

conflict alert

A function of certain ATC automated systems that is designed to alert radar controllers to existing or pending situations that are recognized by the program parameters and require immediate attention or action.

- abbreviation: CA
- Fr: alerte de conflit*

conflict detection

The discovery of a conflict as a result of a conflict search.

Fr: détection de conflit

conflict resolution

The resolution of potential conflicts between IFR/VFR and VFR/VFR aircraft that are radar-identified and in communication with ATC.

Fr: résolution de conflit

conflict search

The computation and comparison of the predicted flight paths of two or more aircraft for the purpose of determining conflicts.

Fr: recherche de conflit

constant descent final approach

Other expression for: **continuous descent final approach** (CDFA)

“Contact . . .”

An expression used in radiocommunication to establish communication with a facility (which is given, along with the frequency to be used, if appropriate).

Fr: « Contactez... »

“Contact”

An expression used in radiocommunication meaning “Visual contact has been established.”

- see also: **contact approach**

Fr: « Contact visuel »

contact approach

An approach wherein an aircraft on an IFR flight plan (FP), having an ATC authorization and operating clear of clouds with at least 1 mi. flight visibility and a reasonable expectation of continuing to the destination airport in those conditions, may deviate from the instrument approach procedure (IAP) and proceed to the destination airport by visual reference to the surface of the earth.

Fr: approche contact

contact point

A specified position, time or level at which an aircraft is required to establish radio communication with an ATC unit.

Fr: point de contact

contaminant

In the context of NOTAMJ and ICAO SNOWTAM, material on a surface including water, slush, snow, compacted snow, ice, or frost.

- see also: **bare and damp**, **bare and dry** and **bare and wet**

Fr: contaminant

continuous descent final approach

A technique, consistent with stabilized approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude/height at or above the FAF altitude/height to a point approximately 15 m (50 ft) above the

landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown.

- abbreviation: CDFA
 - also called: constant descent final approach
- Fr: approche finale en descente continue*

control area

A controlled airspace extending upwards vertically from a specified height above the surface of the earth.

- abbreviation: CTA
- Fr: région de contrôle*

control area extension

A controlled airspace of defined dimensions within the low level airspace (LLA), extending upwards from 2200 ft AGL unless otherwise specified.

- abbreviation: CAE
- Fr: prolongement de région de contrôle*

controlled aerodrome

An aerodrome at which an ATC unit is in operation.

Fr: aérodrome contrôlé

controlled airspace

An airspace of defined dimensions within which ATC service is provided.

Fr: espace aérien contrôlé

controlled flight into terrain

An occurrence in which an aircraft, under the control of the crew, is flown into terrain, water or an obstacle with no prior awareness on the part of the crew of the impending disaster.

- abbreviation: CFIT
- Fr: impact sans perte de contrôle*

controlled VFR flight

A flight conducted under VFR within Class B airspace and in accordance with an ATC clearance.

- also called: CVFR flight
- Fr: vol VFR contrôlé*

controller

Other expression for: **air traffic controller**

controller-pilot data link communications

A means of direct electronic communication between controller and pilot using data link instead of voice. These communications may include clearances, requests, reports, or any related ATS information.

- abbreviation: CPDLC
- Fr: communications contrôleur-pilote par liaison de données*

controlling agency

The ATC unit that normally exercises ATC or provides advisory service in a given airspace.

Fr: organisme de contrôle

control sector

A subdivision of a designated control area within which responsibility is assigned to one controller or to a small group of controllers.

Fr: secteur de contrôle

control station

The remote facilities or equipment from which a remotely piloted aircraft is controlled and monitored.

- see also: **command and control link**, **flyaway**, **lost link**, **lost-link procedure**, and **remotely piloted aircraft (RPA)**

Fr: poste de contrôle

control tower

A unit established to provide ATC service to aerodrome traffic.

- abbreviation: TWR
- also called: tower

Fr: tour de contrôle

control zone

A controlled airspace of defined dimensions extending upwards from the surface of the earth up to and including 3000 ft AAE unless otherwise specified.

- abbreviation: CZ

Fr: zone de contrôle

convective SIGMET

U.S.: A weather advisory concerning convective weather significant to the safety of all aircraft. Convective SIGMETs are issued for tornadoes, lines of thunderstorms, embedded thunderstorms of any intensity level, areas of thunderstorms greater than or equal to VIP level 4 with an area coverage of $\frac{4}{10}$ (40%) or more, and hail $\frac{3}{4}$ in. or greater.

converging runway display aid

A radar software that permits the sequencing and spacing of aircraft by terminal controllers.

- abbreviation: CRDA

Fr: aide d'affichage de pistes convergentes

Coordinated Universal Time

The time system used in aviation operations and given to the nearest minute, except when the pilot requests a time check. Time checks are given to the nearest 15 s. The day begins at 0000 and ends at 2359.

- written abbreviation: Z or UTC
- spoken expression: zulu or universal

Note: The expression “zulu” is pronounced “ZOO loo.”

Fr: temps universel coordonné

coordinates

The intersection of lines of reference, usually expressed in degrees, minutes and seconds of latitude and longitude, used to determine position or location.

Fr: coordonnées

coordinating controller

A duty controller assigned to coordinate flight data between two or more control positions.

Fr: contrôleur de coordination

COP

Abbreviation for: **change-over point**

Fr: COP

co-pilot

A licensed pilot assigned to duty as a pilot in an aircraft during flight time, other than as

- a pilot-in-command; or
- a pilot receiving flying instruction.

- also called: first officer (F/O)

Fr: copilote

“Correction”

An expression used in radiocommunication meaning “An error has been made in this transmission (or in the message indicated). The correct version is . . .”

Fr: « Correction »

CPDLC

Abbreviation for: **controller-pilot data link communications**

Fr: CPDLC

crash locator beacon

NATO: Expression for: **emergency locator transmitter (ELT)**

CRDA

Abbreviation for: **converging runway display aid**

Fr: CRDA

crew member

A person assigned to duty on an aircraft during flight time.

Fr: membre d'équipage

CRFI

Abbreviation for: **Canadian Runway Friction Index**

Fr: CRFI

CRFI reading

Other expression for: **Canadian Runway Friction Index**

critical engine

The engine the failure of which would most adversely affect the performance or handling qualities of an aircraft.

Fr: moteur le plus défavorable

critical surface

Any stabilizing surface of an aircraft, including the wings, control surfaces, rotors, propellers, horizontal stabilizers, vertical stabilizers and, in the case of an aircraft that has rear-mounted engines, the upper surface of its fuselage.

Fr: surface critique

cross-country flight

A flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures.

Fr: vol-voyage

crossing tracks

An expression used in the application of separation indicating tracks that converge or diverge at an angle of 45° to 135° inclusive.

Fr: routes secants

cross-polar route

Other expression for: **polar route**

crosswind

When referring to wind conditions, a wind not parallel to the runway or the path of an aircraft.

Fr: vent de travers

crosswind component

The wind component measured in knots at 90° to the longitudinal axis of the runway.

Fr: composante de vent de travers

crosswind leg

A flight path extending from the extended centreline of the departure end of the departure runway (or departure path) to the beginning of the downwind leg.

Fr: étape vent de travers

cruise climb

A cruising technique resulting in a net increase in altitude as the aircraft mass decreases.

Note: A clearance or instruction to carry out a cruise climb allows the pilot the option of climbing at any given rate, as well as the option of levelling off at any intermediate altitude.

Fr: montée en croisière

cruising altitude

The altitude, as shown by a constant altimeter indication in relation to a fixed and defined datum, maintained during a flight or portion thereof.

Fr: altitude de croisière

CTA

Abbreviation for: **control area**

Fr: CTA

CTR

ICAO: Abbreviation for: **control zone**

Fr: CTR

C2 link

Other expression for: **command and control link**

CVA

Abbreviation for: **charted visual approach**

Fr: CVA

CVFP

U.S.: Abbreviation for: **charted visual flight procedure approach**

• see: **charted visual approach (CVA)**

CVFR flight

Other expression for: **controlled VFR flight**

CVR

Abbreviation for: **cockpit voice recorder**

Fr: CVR

CWA

U.S.: Abbreviation for: **Center Weather Advisory**

CWAS

Abbreviation for: **Canada Water Aerodrome Supplement**

Fr: CWAS

CZ

Abbreviation for: **control zone**

Fr: CZ

4.5 – D –

DA

Abbreviation for: **decision altitude**

Fr: DA

danger area

An airspace of defined dimensions above international waters within which activities dangerous to the flight of non-participating aircraft could take place at specified times.

Fr: zone dangereuse

dangerous goods

Articles or substances that could pose a significant risk to health, safety, property or the environment.

Fr: marchandises dangereuses

data link ATIS

An automatic terminal information service (ATIS) provided by data link.

- abbreviation: D-ATIS

Fr: ATIS par liaison de données

data link departure clearance

An initial IFR clearance delivered electronically via air-ground data link (AGDL) to suitably equipped aircraft and involving a direct data link dialog between ATC and the flight crew.

- abbreviation: DCL
- see also: **departure clearance** and **pre-departure clearance** (PDC)

Fr: autorisation de départ par liaison de données

data link initiation capability

The function of a communication system which provides the necessary information to enable data link communications between ATS ground and aircraft systems and includes features such as log-on, update, contact and ground forward. It is the access mode for the provision of automatic dependent surveillance (ADS) and controller-pilot data link communications (CPDLC).

- abbreviation: DLIC

Fr: capacité d'amorçage de la liaison de données

data link VOLMET

In-flight meteorological information provided by data link.

- abbreviation: D-VOLMET

Fr: VOLMET par liaison de données

date-time group

A combination of the date and time in a single six-figure group. When used in the text of a NOTAM, it is composed of ten figures, e.g. 9501191200. The first two digits indicate the year; the second two, the month; the third two, the day; and the last four, the hour and the minutes.

Fr: groupe date-heure

D-ATIS

Abbreviation for: **data link ATIS**

Fr: D-ATIS

day

Canada (CARs): Other expression for: **daylight**

daylight

The period of time during any day that begins with the morning civil twilight and ends with the evening civil twilight.

Fr: lumière du jour

DCL

Abbreviation for: **data link departure clearance**

Fr: DCL

DCPC

Abbreviation for: **direct controller-pilot communications**

Fr: DCPC

dead reckoning navigation

The estimating or determining of position by advancing an earlier known position by the application of direction, time and speed data.

- abbreviation: DR

Fr: navigation à l'estime

decision altitude

A specified altitude in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach to land has not been established.

- abbreviation: DA

- see also: **decision height** (DH)

Note: Decision altitude (DA) is referenced to mean sea level (MSL) and decision height (DH) is referenced to the threshold elevation.

Fr: altitude de décision

decision height

A specified height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach to land has not been established.

- abbreviation: DH

- see also: **decision altitude** (DA)

Note: Decision height (DH) is referenced to the threshold elevation and decision altitude (DA) is referenced to mean sea level (MSL).

Fr: hauteur de décision

defence visual flight rules

Rules applicable to flights within an air defence identification zone (ADIZ) conducted under VFR.

- abbreviation: DVFR

Fr: règles de vol à vue de la défense

Department of National Defence

Canada: The federal authority responsible for military aviation.

- abbreviation: DND

Fr: ministère de la Défense nationale

departure clearance

An initial IFR clearance delivered by multiple mediums, including by voice.

- see also: **data link departure clearance** (DCL) and **pre-departure clearance** (PDC)

Fr: autorisation de départ

departure clearance message

A message sent by data link by ATC to the flight crew of an aircraft on the ground in response to a valid departure clearance request (RCD).

- abbreviation: CLD

- see also: **data link departure clearance** (DCL), **departure clearance readback** (CDA), **departure clearance request** (RCD), and **pre-departure clearance** (PDC)

Fr: message d'autorisation de départ

departure clearance readback

A message sent by data link by the flight crew of an aircraft on the ground to ATC upon receipt of a departure clearance message (CLD).

- abbreviation: CDA

• see also: **data link departure clearance** (DCL), **departure clearance message** (CLD), **departure clearance request** (RCD), and **pre-departure clearance** (PDC)

Fr: relecture d'autorisation de départ

departure clearance request

A request sent by data link by the flight crew of an aircraft on the ground to ATC to initiate data link departure clearance (DCL) or pre-departure clearance (PDC).

- abbreviation: RCD

• see also: **data link departure clearance** (DCL), **departure clearance message** (CLD), **departure clearance readback** (CDA), and **pre-departure clearance** (PDC)

Fr: demande d'autorisation de départ

departure control

A function of an approach control facility providing ATC service for departing IFR and, under certain conditions, VFR aircraft.

Fr: contrôle des départs

departure controller

A duty controller assigned to a departure control position.

Fr: contrôleur des départs

departure time

The time an aircraft becomes airborne.

- also called: takeoff time

Fr: heure de départ

designated unit

A unit that serves as a communications link into the NAV CANADA system for the dissemination of information and that monitors or supports the day-to-day operation of a community aerodrome radio station (CARS). The designated unit may have one or more CARS reporting to it.

Fr: unité désignée

destination alternate aerodrome

An alternate aerodrome specified in the flight plan (FP) to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing.

- see also: **alternate aerodrome**

Fr: aérodrome de dégagement à destination

destination unit

The unit whose area of responsibility (AOR) encompasses the destination aerodrome.

Fr: unité de destination

DETRESFA

ICAO: Abbreviation for: **distress phase**

Fr: DETRESFA

deviation

(1) A departure from a current clearance, such as an off-course manoeuvre, to avoid weather or turbulence.

Fr: déviation

(2) The angular difference between magnetic and compass headings.

Fr: déviation

DF

Abbreviation for: **direction finder**
Fr: DF

DF approach procedure

U.S.: A procedure used under emergency conditions where another instrument approach procedure (IAP) cannot be executed. DF guidance for an instrument approach is given by ATC facilities with DF capability.

DF fix

The geographical location of an aircraft obtained by one or more DF.
Fr: repère radiogoniométrique

DF guidance

Headings provided to aircraft by facilities equipped with direction-finding equipment. These headings, if followed, will lead the aircraft to a predetermined point, such as the radio direction-finding station or an airport. DF guidance is given to aircraft in distress or to other aircraft that request the service.

- also called: DF steer

Fr: guidage radiogoniométrique

DF station

Other expression for: **radio direction-finding station**

DF steer

Other expression for: **DF guidance**

DH

Abbreviation for: **decision height**
Fr: DH

dial-up RCO

Other expression for: **dial-up remote communications outlet (DRCO)**

dial-up remote communications outlet

A standard RCO equipped with a dial-up unit to connect the pilot with an FIC via a commercial telephone line.

- abbreviation: DRCO
- also called: dial-up RCO
- see also: **remote communications outlet (RCO)**

Fr: installation radio télécommandée à composition

direct

A straight-line flight between two NAVAIDs, fixes, points, or any combination thereof. When used by pilots in describing off-airway routes, points defining direct route segments become compulsory reporting points unless the aircraft is under radar contact.

- also called: direct flight

Fr: vol direct

directed bright light source

Any directed light source that may create a hazard to aviation safety or cause damage to an aircraft or injury to persons on board.

Note: Directed bright light sources include lasers, searchlights, spotlights, and image projectors.

- see also: **laser attack**

Fr: source lumineuse dirigée de forte intensité

direct flight

Other expression for: **direct**

direction finder

Receiving equipment, complete with antennas and associated circuits, used for direction finding.

- abbreviation: DF

Fr: radiogoniomètre

direction-finding station

Other expression for: **radio direction-finding station**

direct controller-pilot communications

Communications between a controller and a pilot without resort to a relay through another unit.

- abbreviation: DCPC

Fr: communications directes contrôleur-pilote

discrete code

Other expression for: **discrete SSR code**

discrete frequency

A separate radio frequency for use in direct communications that reduces frequency congestion by controlling the number of users on a particular frequency at one time.

Fr: fréquence discrète

discrete SSR code

A specific mode 3/A code assigned to one aircraft only.

- also called: discrete code

Fr: code SSR discret

displaced threshold

A threshold not located at the end of a runway.

Fr: seuil décalé

“Disregard”

An expression used in radiocommunication meaning “Ignore or consider that transmission as not sent.”

Fr: « Ignorez »

distance measuring equipment

Airborne and ground equipment used to measure the slant range distance from a DME NAVAID in nautical miles.

- abbreviation: DME

Fr: équipement de mesure de distance

distance of turn anticipation

The distance measured parallel to the course from the earliest position of the intermediate approach waypoint (IWP) at which the turn will be commenced.

- abbreviation: DTA

Fr: distance d'anticipation de virage

distress

Condition of being threatened by serious and/or imminent danger and of requiring immediate assistance. The spoken word for distress is MAYDAY, and it is pronounced three times.

- see also: “**Mayday**”

Fr: détresse

distress phase

(1) A phase that begins when

- (a) the fuel on board is considered to be exhausted or to be insufficient to enable the aircraft to land safely;

- (b) information is received that indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely; or
- (c) information is received that the aircraft is about to make, or has made, a forced landing.

- see also: **emergency phase**

Fr: phase de détresse

- (2) ICAO: A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

- abbreviation: DETRESFA

- see also: **emergency phase**

Fr: phase de détresse

dive brake

Other expression for: **speed brake**

DLIC

Abbreviation for: **data link initiation capability**

Fr: DLIC

DME

Abbreviation for: **distance measuring equipment**

Fr: DME

DME fix

A geographical position determined by reference to a NAVAID, which provides distance and azimuth information, and defined by a specified distance in nautical miles and a radial in degrees magnetic, true or grid from the NAVAID.

Fr: repère DME

DME separation

The spacing of aircraft in terms of distances (nautical miles) determined by reference to DME.

Fr: espacement DME

DND

Canada: Abbreviation for: **Department of National Defence**

Fr: MDN

DOD FLIP

U.S.: Department of Defense Flight Information Publications used for flight planning, en-route, and terminal operations.

downwind

Other expression for: **downwind leg**

downwind leg

A flight path parallel to the landing runway (or landing path) in the direction opposite to landing. The downwind leg normally extends between the crosswind leg and the base leg.

- also called: downwind

Fr: étape vent arrière

downwind termination waypoint

The waypoint located downwind to the landing runway abeam the final approach course fix (FACF) where an open RNAV STAR terminates.

- abbreviation: DTW

- see also: **instrument approach waypoints**

Fr: point de cheminement terminal vent arrière

DP

U.S.: Abbreviation for: **instrument departure procedure**

DR

Abbreviation for: **dead reckoning navigation**

Fr: DR

drag chute

A parachute device installed on certain aircraft that is deployed to assist in deceleration of the aircraft.

Fr: parachute de freinage

DRCO

Abbreviation for: **dial-up remote communications outlet**

Fr: DRCO

drifting snow

Snow that is raised less than approximately 7 ft above ground.

Fr: chasse-neige basse

DTA

Abbreviation for: **distance of turn anticipation**

Fr: DTA

DTW

Abbreviation for: **downwind termination waypoint**

Fr: DTW

DVFR

Abbreviation for: **defence visual flight rules**

Fr: DVFR

D-VOLMET

Abbreviation for: **data link VOLMET**

Fr: D-VOLMET

4.6 – E –

EAC

Abbreviation for: **expected approach clearance time**
Fr: EAC

EAT

Abbreviation for: **expected approach time**
Fr: EAT

ECC

Abbreviation for: **emergency coordination centre**
Fr: ECC

ECCM

Abbreviation for: **electronic counter-countermeasures**
Fr: ECCM

ECM

Abbreviation for: **electronic countermeasures**
Fr: ECM

EDCT

U.S.: Abbreviation for: **expected departure clearance time**

EEP

Abbreviation for: **end exercise point**
Fr: EEP

EET

Abbreviation for: **estimated elapsed time**
Fr: EET

EFB

Abbreviation for: **electronic flight bag**
Fr: OEPP

EFC

Abbreviation for: **expected further clearance time**
Fr: EFC

EFVS

Abbreviation for: **enhanced flight vision system**
Fr: EFVS

effective coverage

The area surrounding a non-directional beacon (NDB) within which bearings can be obtained with an accuracy sufficient for the nature of the operation concerned.
Fr: couverture effective

electronic counter-countermeasures

The division of electronic warfare involving actions taken to ensure friendly, effective use of the electromagnetic spectrum despite the enemy's use of electronic warfare.

- abbreviation: ECCM
- see also: **electronic countermeasures**
Fr: contre-contre-mesures électroniques

electronic countermeasures

The division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum. ECMs include

- (a) electronic jamming; and
- (b) electronic deception.

- abbreviation: ECM

- see also: **electronic counter-countermeasures**

Fr: contre-mesures électroniques

electronic deception

Electronic countermeasures (ECM) consisting of the deliberate radiation, reradiation, alteration, absorption, or reflection of electromagnetic energy in a manner intended to mislead an enemy in the interpretation or use of information received by his or her electronic systems. There are two categories of electronic deception:

- (a) manipulative deception;
- (b) imitative deception.

Fr: déception électronique

electronic flight bag

An electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of certain functions to support flight operations or duties.

- abbreviation: EFB

Fr: organisateur électronique de poste de pilotage

electronic jamming

Electronic countermeasures (ECM) consisting of the deliberate radiation, reradiation, or reflection of electromagnetic energy with the object of impairing the use of electronic devices, equipment, or systems being used by an enemy.

Fr: brouillage électronique

ELT

Abbreviation for: **emergency locator transmitter**

Fr: ELT

ELT(AD)

Abbreviation for: **automatically deployable ELT**

Fr: ELT(AD)

ELT(AF)

Abbreviation for: **automatic fixed ELT**

Fr: ELT(AF)

ELT(AP)

Abbreviation for: **automatic portable ELT**

Fr: ELT(AP)

ELT(S)

Abbreviation for: **survival ELT**

Fr: ELT(S)

EMAS

Abbreviation for: **engineered material arresting system**

Fr: EMAS

emergency coordination centre

A facility established at selected airports to provide assistance to aircraft experiencing emergencies such as bomb threats or acts of unlawful interference.

- abbreviation: ECC

Fr: centre de coordination des urgences

emergency frequency

A frequency (for example 121.5 MHz) used for transmitting emergency information.

Fr: fréquence d'urgence

emergency locator transmitter

A generic term describing equipment that broadcasts distinctive signals on designated frequencies and, depending on application, may either sense a crash and operate automatically or be manually activated. An ELT may be any of the following:

- (a) **automatic fixed ELT** (ELT(AF))
- (b) **automatic portable ELT** (ELT(AP))
- (c) **automatically deployable ELT** (ELT(AD))
- (d) **survival ELT** (ELT(S))

- abbreviation: ELT

Fr: radiobalise de repérage d'urgence

emergency operations centre

ICAO: Expression for: **emergency coordination centre** (ECC)

emergency phase

A generic expression meaning, as the case may be, uncertainty phase, alert phase or distress phase.

Fr: phase d'urgence

Emergency Security Control of Air Traffic Plan

The measures to be implemented by Her Majesty in right of Canada in accordance with the North American Aerospace Defence Command (NORAD) Agreement in the case of an air defence emergency.

- abbreviation: ESCAT Plan

Fr: plan relatif au contrôle de sécurité d'urgence de la circulation aérienne

end exercise point

The point at which an aircraft is no longer classified as faker.

- abbreviation: EEP

Fr: point de fin d'exercice

engineered material arresting system

A soft ground arrestor system, located beyond the end of the runway and centred on the extended runway centreline, that deforms under the weight of an aircraft, bringing it to a safe stop in the event of an overrun without structural damage to the aircraft or injury to its occupants.

- abbreviation: EMAS

Note: EMAS beds are made up of a grouping of blocks of crushable cellular concrete that will reliably deform under the weight of an aircraft

Fr: dispositif d'arrêt à matériau absorbant

enhanced flight vision system

An aircraft-based system that displays electronic real-time images of the actual external scene achieved through the use of image sensors.

- abbreviation: EFVS
- see also: **night vision goggles** (NVG) and **night vision imaging system** (NVIS)

Fr: système de vision en vol améliorée

enhanced vision system

ICAO: Expression for: **enhanced flight vision system** (EFVS)

- abbreviation: EVS

en-route alternate aerodrome

An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.

- see also: **alternate aerodrome**

Fr: aérodrome de dégagement en route

en-route clearance

A clearance covering the flight path of an aircraft after takeoff to the point at which an approach to land is expected to commence.

Fr: autorisation en route

en-route climb performance

ICAO: The climb (or descent) performance with the aeroplane in the en-route configuration with:

- (a) the critical power-unit inoperative; and
- (b) the critical two power-unit inoperative in the case of aeroplanes having three or more power-units.

Fr: performance ascensionnelle en route

en-route descent

Descent from the en-route cruising altitude.

Fr: descente en route

entry fix

The first reporting point over which an aircraft passes or is expected to pass upon entering a flight information region (FIR) or control area (CTA).

Fr: repère d'entrée

EOBT

ICAO and U.S.: Abbreviation for: **estimated off-block time**

ESCAT Plan

Abbreviation for: **Emergency Security Control of Air Traffic Plan**

Fr: plan ESCAT

established holding area

A holding area that has been predetermined by the unit responsible for the airspace concerned.

Fr: zone d'attente établie

estimate

Canada: The time, in UTC, at which an IFR aircraft is calculated, by either the controller, the pilot or through automated means, to arrive over a significant point.

Fr: estimée

“Estimated . . .”

Canada: An expression used within ATS when communicating an ATC estimate.

Note: This expression is used in conjunction with a place and a time.

Fr: « Estimé... »

estimated departure time

Other expression for: **estimated time of departure** (ETD)

estimated elapsed time

The estimated time required to proceed from one significant point to another.

- abbreviation: EET

Fr: *durée estimée*

estimated landing time

Other expression for: **estimated time of landing** (ETL)

estimated off-block time

The estimated time at which the aircraft will commence movement associated with departure.

Fr: *heure estimée de départ du poste de stationnement*

estimated time en route

The estimated flying time from departure point to destination (liftoff to touchdown).

- abbreviation: ETE

Fr: *durée prévue en route*

estimated time of arrival

- (1) The time at which it is estimated that the aircraft will land, provided that no delay is experienced.

Calculation of the ETA in the case of an IFR flight to an aerodrome served by one or more NAVAIDs is based on the average time required by the aircraft to complete an instrument approach procedure (IAP) at the aerodrome.

- abbreviation: ETA
- see also: **estimated time of landing** (ETL)

Fr: *heure d'arrivée prévue*

- (2) ICAO: For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.

- abbreviation: ETA
- Fr: *heure d'arrivée prévue*

estimated time of departure

The estimated time at which an aircraft will become airborne.

- abbreviation: ETD
- also called: estimated departure time

Fr: *heure de départ prévue*

estimated time of landing

An aircraft's threshold-crossing estimate based on the addition of a control estimate for the metering fix and the predetermined time required to traverse a standard projected flight path from the metering fix to the threshold.

- abbreviation: ETL
- also called: estimated landing time
- see also: **estimated time of arrival** (ETA)

Fr: *heure d'atterrissage prévue*

“Estimating”

Canada: An expression used within ATS when communicating a pilot estimate.

Fr: « *Estimant* »

estimating arrival

ICAO: Expression for: **estimated time of arrival** (ETA)

ETA

Abbreviation for: **estimated time of arrival**

Fr: ETA

ETD

Abbreviation for: **estimated time of departure**

Fr: ETD

ETE

Abbreviation for: **estimated time en route**

Fr: ETE

ETL

Abbreviation for: **estimated time of landing**

Fr: ETL

evening civil twilight

Relative to the standard meridians of the time zones, the period of time that begins at sunset and ends at the time specified by the Institute of National Measurement Standards of the National Research Council of Canada.

Note: Evening civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon.

Fr: crépuscule civil

EVS

ICAO: Abbreviation for: **enhanced vision system**

Fr: EVS

EWH

Abbreviation for: **eye-to-wheel height**

Fr: EWH

“Execute missed approach”

An expression used to instruct a pilot executing an instrument approach procedure (IAP) to initiate a climb, continue inbound to the missed approach point (MAP) and execute the missed approach procedure as described on the instrument approach chart or as assigned by ATC.

Fr: « Exécutez une approche interrompue »

exercise route

The route of flight to be flown by strike-force aircraft from departure to point of recovery.

Fr: route d'exercice

exit fix

The last reporting point over which an aircraft passes or is expected to pass before leaving a flight information region (FIR) or a control area (CTA).

Fr: repère de sortie

expanded frontal width

Either the lateral distance between the outermost aircraft in a moving altitude reservation when such distance has been stated in an approval request (APREQ) and has been approved, or the approved frontal width for a non-standard formation flight.

Fr: largeur frontale étendue

“Expect approach clearance at . . .”

An expression used in radiocommunication to indicate the time at which it is expected that an aircraft will be cleared to commence approach for a landing.

Fr: « Autorisation d’approche prévue à... »

expected approach clearance time

The time at which it is expected that an aircraft will be cleared to commence approach for a landing.

- abbreviation: EAC

Fr: heure prévue d’autorisation d’approche

expected approach time

The time at which ATC expects that an arriving aircraft, following a delay, will leave the holding fix to complete its approach for landing.

- abbreviation: EAT

Fr: heure d’approche prévue

expected departure clearance time

U.S.: The runway release time assigned to an aircraft in a controlled departure time program and shown on the flight progress strip as an EDCT.

- abbreviation: EDCT

expected further clearance time

The time at which it is expected that further clearance will be issued to an aircraft.

- abbreviation: EFC

Fr: heure prévue d’autorisation subséquente

“Expect further clearance at . . .”

An expression used in radiocommunication to indicate the time at which it is expected that further clearance will be issued to an aircraft.

Fr: « Autorisation subséquente prévue à... »

expedite (to)

An expression used by ATC when prompt compliance is required to avoid the development of an imminent situation.

Fr: exécuter rapidement

eye-to-wheel height

The vertical distance from a pilot’s eyes to the lowest portion of the aircraft in the landing attitude. This distance ranges from less than 4 ft up to 45 ft for some wide-bodied aircraft.

- abbreviation: EWH

Fr: hauteur entre les yeux et les roues

4.7 – F –

FAA

U.S.: Abbreviation for: **Federal Aviation Administration**

FACF

Abbreviation for: **final approach course fix**

Fr: FACF

FAF

Abbreviation for: **final approach fix**

Fr: FAF

faker target

A strike-force aircraft simulating a hostile aircraft during an air defence exercise while in the strike-route portion of the mission, i.e. initial point or H-hour control line (IP/HHCL) to ground target bomb release line or end exercise point (BRL/EEP).

Fr: cible plastron

fan marker

Other expression for: **fan marker beacon**

- abbreviation: FM

fan marker beacon

A type of non-directional beacon (NDB), the emissions of which radiate in a vertical fan-shaped pattern.

- also called: fan marker (FM)

Fr: radioborne en éventail

FANS

Abbreviation for: **future air navigation systems**

Fr: FANS

FAP

Abbreviation for: **final approach point**

Fr: FAP

FAS

Abbreviation for: **final approach segment**

Fr: FAS

FARs

U.S.: Abbreviation for: **Federal Aviation Regulations**

FATO

Abbreviation for: **final approach and takeoff area**

Fr: FATO

FAWP

Abbreviation for: **final approach waypoint**

Fr: FAWP

FDR

Abbreviation for: **flight data recorder**

Fr: FDR

feathered propeller

A propeller the blades of which have been rotated so that the leading and trailing edges are nearly parallel with the aircraft flight path to stop or minimize drag and engine rotation.

Fr: hélice en drapeau

Federal Aviation Administration

U.S.: The federal authority responsible for civil aviation.

- abbreviation: FAA

Federal Aviation Regulations

U.S.: Regulations relating to aviation.

- abbreviation: FARs

feeder fix

A fix depicted on instrument approach charts that establishes the starting point of the feeder route.

Fr: repère de raccordement

feeder route

A route depicted on instrument approach charts to designate routes for aircraft to proceed from the en-route structure to a point on the instrument approach procedure (IAP).

- also called: transition

Fr: route de raccordement

ferry flight

A flight for the purpose of

- (a) returning an aircraft to base;
- (b) delivering an aircraft from one location to another; or
- (c) moving an aircraft to and from a maintenance base.

Ferry flights, under certain conditions, may be conducted under the terms of a special flight permit.

Fr: vol de convoyage

FI

Abbreviation for: **flight itinerary**

Fr: FI

FIC

Abbreviation for: **flight information centre**

Fr: FIC

field elevation

Other expression for: **aerodrome elevation**

final

An expression commonly used to mean that an aircraft is on the final approach course or is aligned with a landing area.

Fr: finale

final approach

Canada: Other expression for: **final approach segment (1)**

final approach and takeoff area

A defined area over which the final phase of the approach manoeuvre of a helicopter to hover or to land is completed and from which the takeoff manoeuvre is commenced.

- abbreviation: FATO

Note ICAO: Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the rejected takeoff area available.

Fr: aire d'approche finale et de décollage

final approach area

The area within which the final approach portion of an instrument approach procedure (IAP) is carried out.
Fr: zone d'approche finale

final approach course

A bearing/radial/track of an instrument approach leading to a runway or an extended runway centreline, all without regard to distance.
Fr: trajectoire d'approche finale

final approach course fix

Canada: A fix and/or waypoint located on the final approach course of an instrument approach procedure (IAP)

- (a) prior to the point of glide path (GP) intercept on a precision approach procedure;
 - (b) prior to the final approach fix (FAF) on a non-precision approach procedure that has a designated FAF;
 - (c) prior to any stepdown fixes on a non-precision approach procedure with designated fixes but no FAF; or
 - (d) at a point that would permit a normal landing approach on a non-precision approach procedure with no FAF or stepdown fixes.
- abbreviation: FACF
 - also called: centreline fix
 - see also: **instrument approach waypoints**

Fr: repère de trajectoire d'approche finale

final approach fix

(1) U.S. and Canada: The fix of a non-precision instrument approach procedure (IAP) where the final approach segment commences.

- abbreviation: FAF
- see also: **precise final approach fix (PFAF)**

Note: This point is depicted by the Maltese cross symbol on U.S. Government charts.

Fr: repère d'approche finale

(2) ICAO: That fix of an instrument approach procedure where the final approach segment commences.

- abbreviation: FAF
- Fr: repère d'approche finale*

final approach gate

A rectangular area, 1 mi. wide and 3 mi. long, bisected by the extended centreline of the runway and located so that the inner boundary of the area is at least 5 mi. from the approach end of the runway.

Fr: entrée d'approche finale

final approach leg

Other expression for: **final leg**

final approach mode

The operational condition of certain aircraft navigation guidance equipment that supports flight operations in the final approach and runway regions.

- also called: approach mode
- Fr: mode approche finale*

final approach point

The point of an instrument approach procedure (IAP) where the final approach segment commences.

- abbreviation: FAP
- Fr: point d'approche finale*

final approach segment

- (1) Canada: That part of an instrument approach procedure (IAP) from the time that the aircraft
- completes the last procedure turn or base turn, where one is specified;
 - intercepts the last track specified for the procedure;
 - (for non-precision approaches) crosses the final approach fix (FAF), final approach waypoint (FAWP) or final approach point (FAP); or
 - (for precision approaches) crosses the point where the vertical path or glide path intercepts the intermediate approach segment altitude until the aircraft reaches the missed approach point (MAP).

- abbreviation: FAS

- also called: final approach

Fr: segment d'approche finale

- (2) ICAO: That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

Fr: segment d'approche finale

final approach waypoint

The waypoint of a non-precision instrument approach procedure (IAP) where the final approach segment commences.

- abbreviation: FAWP

- see also: **instrument approach waypoints**

Fr: point de cheminement d'approche finale

final leg

A flight path extending from the end of the base leg in the direction of landing to and along the extended centreline of the runway (or landing path) to the threshold of the landing runway (or landing path).

- also called: final approach leg

Fr: étape finale

FIR

Abbreviation for: **flight information region**

Fr: FIR

first officer

Other expression for: **co-pilot**

- abbreviation: F/O

first pilot

DND: A pilot qualified on aircraft type to unit standards and authorized as first pilot.

- see also: **co-pilot** and **first officer** (F/O)

Fr: pilote

FIS

Abbreviation for: **flight information service**

Fr: FIS

FISE

Abbreviation for: **flight information service en route**

Fr: FISE

fix

A geographical location determined either by visual reference to the ground or by means of radio aids or other navigational devices.

Fr: repère

fix tolerance area

An area determined by considering the position indication errors applicable to a particular type of fix.
Fr: aire de tolérance de repère

FL

Abbreviation for: **flight level**
Fr: FL

flag

An aircraft warning device indicating that
(a) navigation or flight instruments are inoperative or are not operating satisfactorily; or
(b) navigation signal strength or quality falls below acceptable levels.

- also called: flag alarm

Fr: drapeau

flag alarm

Other expression for: **flag**

flameout

A loss of combustion in turbine engines resulting in a loss of engine power.
Fr: arrêt de turbomoteur

flash blindness

The temporary or permanent inability to see caused by bright light entering the eye and persisting after the illumination has ceased.

- see also: **afterimage** and **glare**

Fr: aveuglement par éclair

flat break

Other expression for: **overhead break**

flight advisory controller

DND: A duty controller assigned to a flight advisory position.

Fr: contrôleur du service consultatif

flight advisory message

The communication of information that will be of assistance to a pilot and that includes weather information, aerodrome conditions, and information relating to aircraft manoeuvring or operating in the vicinity of an aerodrome.

Fr: message consultatif en vol

flight advisory service

DND: Expression for: **aerodrome advisory service (AAS)**

flight data

Data regarding the actual or intended movement of aircraft, normally presented in coded or abbreviated form.

Fr: données de vol

flight data recorder

An aircraft-based digital device that uses a combination of data providers to collect and record parameters that reflect the state and performance of an aircraft.

- abbreviation: FDR

- see also: **cockpit voice recorder (CVR)** and **flight recorder**

Fr: enregistreur de données de vol

flight information

Information useful for the safe and efficient conduct of flight, including information on air traffic, meteorological conditions, aerodrome conditions or air route facilities.

Fr: information de vol

flight information centre

(1) Canada: A centralized ATS unit that provides services pertinent to pre-flight and the en-route phase of flight.

- abbreviation: FIC
- see also: **flight service station** (FSS)

Note: The U.S. does not operate flight information centres (FICs). In the U.S., the services provided by FICs are performed by air traffic control (ATC) facilities, flight service stations (FSSs) and rescue coordination centers (RCCs).

Fr: centre d'information de vol

(2) ICAO: A unit established to provide flight information service and alerting service.

- abbreviation: FIC

Fr: centre d'information de vol

flight information region

An airspace of defined dimensions extending upwards from the surface of the earth within which flight information service (FIS) and alerting service are provided.

- abbreviation: FIR

Fr: région d'information de vol

flight information service

A service consisting of the following:

- (a) the dissemination of aviation weather information and aeronautical information for departure, destination and alternate aerodromes along a proposed route of flight;
- (b) the dissemination of aviation weather information and aeronautical information to aircraft in flight;
- (c) the acceptance, processing and activation of flight plans (FP) and flight itineraries, amendments to FPs and flight itineraries, and cancellations of FPs and flight itineraries;
- (d) the exchange of FP information with domestic or foreign governments or agencies or foreign ATS units; and
- (e) the provision of known information concerning ground and air traffic.

- abbreviation: FIS

Fr: service d'information de vol

flight information service en route

The provision and receipt by an FIC of information pertinent to the en-route phase of flight.

- abbreviation: FISE

Fr: service d'information de vol en route

flight inspection

The operation of an aircraft for the purpose of

- (a) calibrating air NAVAIDs;
- (b) monitoring or evaluating the performance of air NAVAIDs; or
- (c) obstacle assessment.

Fr: inspection en vol

flight itinerary

Specified information regarding the intended flight of an aircraft that is provided to a responsible person, an ATS unit, or a community aerodrome radio station (CARS).

Note: A flight itinerary has different search and rescue alerting parameters than a flight plan.

- abbreviation: FI
- see also: **flight plan** (FLT PLN or FP)

Fr: itinéraire de vol

flight level

The altitude expressed in hundreds of feet indicated on an altimeter set to 29.92 in. of mercury or 1013.2 mb.

- abbreviation: FL
- Fr: niveau de vol*

flight line

(1) Other expression for: **apron**

(2) The predetermined directional line of flight within a flying display area.

- also called: show line

Fr: ligne de limite d'évolution en vol

(3) An actual photographic run of a photo survey aircraft, in which a series of overlapping photographic exposures are being taken and in which the aircraft must necessarily move precisely along a predetermined track or tracks and at a predetermined critical altitude.

Fr: axe de vol

flight management system

An aircraft computer system that uses a large database to allow routes to be programmed and fed into the system by means of a data loader. The system is constantly updated with regard to position and accuracy by reference to conventional NAVAIDs.

- abbreviation: FMS

Fr: système de gestion de vol

flight path

A trajectory along which an aircraft is flying or intended to be flown.

Fr: trajectoire de vol

flight plan

Specified information regarding the intended flight of an aircraft that is provided to an ATS unit or a community aerodrome radio station (CARS).

- abbreviations: FLT PLN or FP
- see also: **flight itinerary** (FI)

Fr: plan de vol

flight plan data

Data selected from the flight plan (FP) for purposes of processing, display or transfer.

Fr: données de plan de vol

flight planning centre

DND: Expression for: **flight plan office**

- abbreviation: FPC

flight plan office

An FIC or that part of an area control centre (ACC) where flight plans and flight itineraries may be filed.

Fr: bureau des plans de vol

flight plan unique identifier

Canada: An electronically generated numeric or alpha-numeric code that can be used as an ATS system confirmation of message delivery and receipt. It can also be used as a message reference number. For example, when acknowledged by the pilot-in-command (PIC), it confirms that an IFR clearance issued to an aircraft via data link under the pre-departure clearance (PDC) program has been correctly received.

- abbreviation: FPU

Note: This abbreviation is pronounced "fe-POO-i."

Fr: indicatif unique du plan de vol

flight recorder

Any type of recorder installed in an aircraft to facilitate the investigation of accidents or incidents.

- see also: **cockpit voice recorder** (CVR) and **flight data recorder** (FDR)

Fr: enregistreur de vol

flight services

Canada: Flight assistance and information provided by FSSs and FICs for aviation safety. Flight services include pilot briefings, flight plan (FP) acceptance and processing, aerodrome advisories, inflight communications, relay of ATC clearances, assistance to aircraft in emergency situations, alerting and searches for VFR aircraft, DF assistance, NAVAID monitoring, and issuance of NOTAM and surface weather observations.

Fr: services de vol

flight service specialist

A certified employee assigned duties and responsibilities at an FSS or FIC.

Fr: spécialiste de l'information de vol

flight service station

(1) Canada: An ATS unit that provides services pertinent to the arrival and departure phases of flight at uncontrolled aerodromes and for transit through a mandatory frequency (MF) area.

- abbreviation: FSS
- see also: **flight information centre** (FIC)

Fr: station d'information de vol

(2) U.S.: An air traffic facility which provides pilot briefings, flight plan processing, en-route flight advisories, search and rescue services, and assistance to lost aircraft and aircraft in emergency situations. FSSs also relay ATC clearances, process Notices to Airmen, broadcast aviation weather and aeronautical information, and advise Customs and Immigration of transborder flights. In Alaska, FSSs provide Airport Advisory Services.

- abbreviation: FSS
- see also: **flight information centre** (FIC)

flight test

A flight conducted to evaluate an applicant for a pilot licence or rating.

- see also: **test flight**

Fr: test en vol

flight time

The time from the moment an aircraft first moves under its own power for takeoff until the moment it comes to rest at the end of the flight.

Fr: temps de vol

flight visibility

The average range of forward visibility at any given time from the cockpit of an aircraft in flight.

Fr: visibilité en vol

flow control

Measures designed to adjust the flow of traffic into a given airspace, along a given route, or bound for a given aerodrome, so as to ensure the most effective utilization of the airspace.

Fr: régulation du débit

FLT PLN

Abbreviation for: **flight plan**

Fr: FLT PLN

flyaway

In respect of a remotely piloted aircraft, an interruption or loss of the command and control link such that the pilot is no longer able to control the aircraft and the aircraft no longer follows its preprogrammed procedures or operates in a predictable or planned manner.

- also called: fly-away
- see also: **command and control link**, **control station**, **lost link**, **lost-link procedure**, and **remotely piloted aircraft (RPA)**

Fr: dérive

fly-away

Other expression for: **flyaway**

fly-by waypoint

A waypoint that requires the use of turn anticipation to avoid an overshoot of the next flight segment.

- see also: **instrument approach waypoints**

Fr: point de cheminement anticipé

fly-in

A prearranged meeting of a number of aircraft at a specified aerodrome which will take place before an invited assembly of persons, and at which no competitive flying or aerial demonstrations will take place.

Fr: rassemblement d'aéronefs

fly-over waypoint

A waypoint that precludes any turn until the waypoint is overflown and is followed by an intercept manoeuvre of the next flight segment.

- see also: **instrument approach waypoints**

Fr: point de cheminement survolé

FM

Abbreviation for: **fan marker**

- see: **fan marker beacon**

Fr: FM

FMS

Abbreviation for: **flight management system**

Fr: FMS

FMSP for arrival

U.S.: Expression for: **RNAV STAR**

FMSP for departure

U.S.: Expression for: **RNAV SID**

F/O

Abbreviation for: **first officer**

- see: **co-pilot**

Fr: P/O

FOD

Abbreviation for: **foreign object debris**

Fr: FOD

“follow-me” vehicle

A vehicle providing dedicated service to pilots when visibility conditions are below RVR 2600 (½ SM).

Fr: véhicule d'escorte

forecast

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

Fr: prévision

foreign object debris

An inanimate object within the movement area which has no operational or aeronautical function and which has the potential to be a hazard to aircraft operations.

- abbreviation: FOD

Note: This abbreviation is pronounced as a spoken word.

Fr: objet intrus

forest fire area

An area on the surface of the earth upon which standing timber, grass or any other vegetation or buildings are smouldering or burning.

Fr: zone d'incendie de forêt

forest fire—temporary flight restrictions

In the interest of safe and efficient fire fighting operations, the Minister may issue a NOTAM restricting flights over a forest fire area to aircraft operating at the request of the appropriate fire control authority (e.g. water bombers), or to aircraft with written permission from the Minister.

Fr: incendie de forêt — restrictions temporaires de vol

formation flight

A flight of a number of aircraft that, by prior arrangement among the pilots, normally operate as a single aircraft with regard to navigation and position reports.

Fr: vol en formation

forward-looking wind shear warning system

ICAO: Expression for: **predictive wind shear system** (PWS)

FP

Abbreviation for: **flight plan**

Fr: FP

FPC

DND: Abbreviation for: **flight planning centre**

- see: **flight plan office**

Fr: FPC

FPL

ICAO: Abbreviation for: **flight plan**

Fr: FPL

FPUI

Canada: Abbreviation for: **flight plan unique identifier**

Note: This abbreviation is pronounced "fe-POO-i."

Fr: FPUI

free area

An area of defined dimensions within which the flight of an aircraft, under certain conditions, does not normally require aircraft movement information service (AMIS) action.

Fr: zone libre

frequency family

A family of frequencies in the aeronautical mobile (R) service that contains two or more frequencies selected from different aeronautical mobile (R) bands and that is intended to permit communications at

any time within the authorized area of use between aircraft stations and appropriate aeronautical stations.

Fr: famille de fréquences

front course sector

The course sector that is situated on the same side of the localizer antenna as the runway.

- see also: **back course sector**

Fr: secteur d'alignement de piste avant

FSS

Abbreviation for: **flight service station**

Fr: FSS

fuel dumping

The intentional airborne release of usable fuel, excluding the dropping of fuel tanks.

- also called: fuel jettisoning
- see also: **jettisoning of external stores**

Fr: vidange de carburant

fuel jettisoning

Other expression for: **fuel dumping**

fuel remaining

The amount of fuel remaining on board until actual fuel exhaustion.

Fr: carburant restant

fuel siphoning

Other expression for: **fuel venting**

fuel venting

The unintentional release of fuel caused by overflow, puncture, loose cap, etc.

- also called: fuel siphoning

Fr: aspiration de carburant

future air navigation systems

Air navigation systems that are capable of satisfying national or international stated requirements, primarily through the use of satellite technology.

- abbreviation: FANS

Fr: futurs systèmes de navigation aérienne

4.8 – G –

GA

Abbreviation for: **general aviation**

Fr: GA

GASA

Canada: Abbreviation for: **geographic area safe altitude**

Fr: GASA

gate hold procedure

A procedure at selected airports to hold aircraft at the gate or another ground location whenever departure delays exceed or are anticipated to exceed 15 min. The sequence for departure will be maintained in accordance with initial call-up unless modified by flow control restrictions. Pilots should monitor ground control and clearance delivery frequencies for engine start-up advisories or a new proposed start time if the delay changes.

Fr: procédure d'attente à la barrière

gate time

For the application of flow control procedures, the original estimated time of arrival (ETA) of the aircraft over the metering fix.

Fr: heure à la porte de minutage

GBAS

ICAO: Abbreviation for: **ground-based augmentation system**

- see: **local area augmentation system (LAAS)**

Fr: GBAS

GCA

Abbreviation for: **ground controlled approach**

Fr: GCA

GCA controller

A duty controller assigned to a ground controlled approach position.

Fr: contrôleur GCA

general aviation

All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.

- abbreviation: GA

Fr: aviation générale

geographic area safe altitude

Canada: The altitude at which an aircraft can fly and maintain a 2000-ft clearance over known obstacles or terrain within a delineated geographic area, as depicted on en-route charts.

- abbreviation: GASA

Note: This term was replaced by the term **area minimum altitude (AMA)** on April 18, 2002.

- see also: **area minimum altitude (AMA)**

Fr: altitude de sécurité de région géographique

glare

A temporary disruption in vision caused by a bright light within an individual's field of vision and lasting only as long as the light is present within that field of vision.

Note: Visible laser light can produce glare and interfere with vision even at low energies, including levels well below that which produce eye damage.

- see also: **afterimage** and **flash blindness**

Fr: éblouissement

glide path

A descent profile determined for vertical guidance during a final approach segment.

- abbreviation: GP
- also called: glide slope (GS)

Fr: alignement de descente

glider

A non-power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on surfaces that remain fixed during flight.

Fr: planeur

glide slope

Other expression for: **glide path** (GP)

- abbreviation: GS

global navigation satellite system

Any navigation system that satisfies stated international navigational requirements using satellite technology. A complete GNSS may include satellites provided by various states and commercial groups and may be complemented by ground systems used to augment and monitor the satellites.

- abbreviation: GNSS
- see also: **global orbiting navigation satellite system** (GLONASS) and **global positioning system** (GPS)

Fr: système mondial de navigation par satellite

global orbiting navigation satellite system

A navigation system based on the transmission of signals from satellites provided and maintained by the Russian Federation and available to civil aviation users.

- abbreviation: GLONASS
- see also: **global navigation satellite system** (GNSS)

Fr: système mondial de satellites de navigation

global positioning system

A navigation system based on the transmission of signals from satellites provided and maintained by the United States of America and available to civil aviation users.

- abbreviation: GPS
- see also: **global navigation satellite system** (GNSS)

Fr: système de positionnement mondial

GLONASS

Abbreviation for: **global orbiting navigation satellite system**

Fr: GLONASS

GNSS

Abbreviation for: **global navigation satellite system**

Fr: GNSS

“Go ahead”

An expression used in radiocommunication meaning “Proceed with your message.”

Note: This expression should not be used in surface movement communications whenever the possibility exists of misconstruing “Go ahead” as an authorization for an aircraft or a vehicle to proceed.

Fr: « Continuez »

“Go around”

An expression used in radiocommunications to instruct a pilot to abandon an approach or landing.

Fr: « Remettez les gaz »

go-around

The procedure followed by a pilot who decides to abandon an approach or landing.

- also called: overshoot (3)

Fr: remise des gaz

GP

Abbreviation for: **glide path**

Fr: GP

GPS

Abbreviation for: **global positioning system**

Fr: GPS

GPWS

Abbreviation for: **ground proximity warning system**

Fr: GPWS

ground-based augmentation system

ICAO: Expression for: **local area augmentation system (LAAS)**

- abbreviation: GBAS

ground control

An ATC service provided for the purpose of:

- (a) preventing collisions on the manoeuvring area between aircraft and between aircraft and obstacles or vehicles; and
- (b) expediting and maintaining an orderly flow of aircraft operating on the manoeuvring area.

Fr: contrôle sol

ground controlled approach

A radar approach controlled from the ground by ATC personnel who transmit instructions to the pilot by radio.

Note: In Canada, this service is provided by military ATC.

- abbreviation: GCA
- see also: **precision radar approach**

Fr: approche contrôlée du sol

ground controller

A duty controller assigned to the ground control position in an airport control tower.

Fr: contrôleur sol

ground effect

The aerodynamic force caused by the reduction of induced drag and resulting in an increase in normal lift for an aircraft flying in close proximity to the surface of the ground or water.

Fr: effet de sol

ground proximity warning system

An electronic system that automatically provides flight crew members on an aircraft in flight with a timely and distinctive warning that the aircraft is in potentially hazardous proximity to the earth's surface.

•abbreviation: GPWS

•see also: **terrain awareness and warning system (TAWS)**

Fr: dispositif avertisseur de proximité du sol

ground return

The desired echoes received from the ground by an airborne radar.

Fr: écho de sol

groundside

The area of an aerodrome not intended to be used for activities related to aircraft operations and to which the public normally has unrestricted access.

Fr: côté ville

ground-taxi

Other expression for: **taxi**

ground-to-air communication

One-way communication from stations or locations on the surface of the earth to aircraft.

• see also: **air-ground communication**

Fr: communications dans le sens sol-air

ground traffic

All traffic, other than aircraft, on the manoeuvring and runway protected areas, such as vehicles, equipment and personnel.

Fr: trafic au sol

ground visibility

In respect of an aerodrome, the visibility at that aerodrome as contained in a weather observation reported by

- (a) an ATC unit;
- (b) an FSS or FIC;
- (c) a community aerodrome radio station (CARS);
- (d) an automated weather observation system (AWOS) used by the Department of Transport, the Department of National Defence or the Atmospheric Environment Service for the purpose of making aviation weather observations; or
- (e) a radio station that is ground-based and operated by an air operator.

Fr: visibilité au sol

GS

Abbreviation for: **glide slope**

• see: **glide path (GP)**

Fr: GS

“... guard”

DND: An expression used in radiocommunications to indicate emergency frequency 243.0 MHz.

Note: An example would be “Monitor guard.”

Fr: fréquence d'urgence

4.9 – H –**HAA**

Abbreviation for: **height above aerodrome**
Fr: HAA

HAL

Abbreviation for: **height above landing**
Fr: HAL

handoff

The process of transferring the radar identification of an aircraft target and radio communications for that aircraft to another controller to ensure the uninterrupted provision of radar service.
Fr: transfert

hang glider

A motorless heavier-than-air aircraft deriving its lift from surfaces that remain fixed in flight, designed to carry not more than two persons and having a launch weight of 45 kg (99.2 lb) or less.
Fr: aile libre

HAT

Abbreviation for: **height above touchdown**
• see: **height above touchdown zone elevation**
Fr: HAT

“Have numbers”

An expression used by pilots to indicate that they have received runway, wind and altimeter information only.
Fr: « J'ai l'information »

Hazardous Inflight Weather Advisory Service

U.S.: Continuous recorded hazardous inflight weather forecasts broadcasted to airborne pilots over selected VHF omnidirectional range (VOR) outlets defined as an HIWAS Broadcast Area.
• abbreviation: HIWAS

hazardous situation

In ATS usage, an occurrence in which flight safety was jeopardized.
Fr: situation dangereuse

HDG

Abbreviation for: **heading**
Fr: HDG

heading

The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from north (true, magnetic, compass or grid north).
• abbreviation: HDG
Fr: cap

heavier-than-air aircraft

An aircraft supported in the atmosphere by lift derived from aerodynamic forces.
Fr: aerodyne

“Heavy”

An expression used in radiocommunications to indicate that an aircraft is certified for a maximum take-off weight of 136 000 kg (300 000 lb) or more.
• see also: **“Large”**, **light aircraft**, **medium aircraft**, **“Small”**, **“Super”**, and **wake turbulence**

Fr: « Lourd »

height above aerodrome

The height in feet of the minimum descent altitude (MDA) above the published aerodrome elevation.

- abbreviation: HAA

Fr: hauteur au-dessus de l'aérodrome

height above landing

The height above a designated helicopter landing area used for helicopter instrument approach procedures (IAP).

- abbreviation: HAL

Fr: hauteur au-dessus de l'aire d'atterrissage

height above touchdown

Other expression for: **height above touchdown zone elevation**

- abbreviation: HAT

height above touchdown zone

Other expression for: **height above touchdown zone elevation**

height above touchdown zone elevation

The height in feet of the decision height (DH) or minimum descent altitude (MDA) above the touchdown zone elevation (TDZE).

- also called: height above touchdown (HAT), height above touchdown zone

Fr: hauteur au-dessus de la zone de poser

helicopter

A power-driven heavier-than-air aircraft that derives its lift in flight from aerodynamic reactions on one or more power-driven rotors on substantially vertical axes.

Fr: hélicoptère

helicopter parking position

A part of the apron designated for the touchdown and parking of helicopters that have taxied from a final approach and takeoff area (FATO), runway or another part of the aerodrome.

Fr: poste de stationnement d'hélicoptère

helicopter stand

ICAO: Expression for: **helicopter parking position**

helipad

A designated area, usually with a prepared surface, used for the takeoff, landing, or parking of helicopters.

Fr: hélisurface

heliport

An aerodrome used or intended to be used for the arrival, landing, takeoff or departure of vertical takeoff and landing aircraft (VTOL).

Fr: héliport

HF

Abbreviation for: **high frequency**

Fr: HF

high frequency

The frequency band between 3 and 30 MHz.

- abbreviation: HF

Fr: haute fréquence

high-intensity runway operations

Operations, used at some airports, that consist of optimizing separation of aircraft on final approach in order to minimize runway occupancy time (ROT) for both arriving and departing aircraft so as to increase runway capacity.

- abbreviation: HIRO

Fr: opérations sur pistes très achalandées

high level air route

In high level airspace (HLA), a prescribed track between specified fixes.

Note: On aeronautical charts, high level air routes are indicated by letters such as “T” or “NAT.”

Fr: route aérienne de l'espace supérieur

high level airspace

All airspace within the Canadian Domestic Airspace (CDA) at or above 18 000 ft ASL.

- abbreviation: HLA

Fr: espace aérien supérieur

high level airway

In controlled high level airspace (HLA), a prescribed track between specified fixes.

Note: On aeronautical charts, high level airways are indicated by the letter “J” (e.g. J500).

Fr: voie aérienne de l'espace supérieur

high level fixed RNAV route

In high level airspace (HLA), a prescribed area navigation track between specified fixes.

Fr: route RNAV fixe de l'espace aérien supérieur

high speed exit

Other expression for: **high speed taxiway**

high speed taxiway

A long-radius taxiway designed and provided with lighting or marking to define the path of aircraft, travelling at high speed (up to 60 kt), from the runway centre to a point on the centre of a taxiway. The high speed taxiway is designed to expedite aircraft turning off the runway after landing, thus reducing runway occupancy time.

- also called: high speed exit, high speed turnoff, long radius exit, rapid exit taxiway, turnoff taxiway
- see also: **rapid-exit taxiway indicator lights** (RETIL)

Fr: voie de sortie rapide

high speed turnoff

Other expression for: **high speed taxiway**

hijacking

An act of unlawful interference involving the seizure or control of an aircraft by force or threat thereof.

- see also: **acts of unlawful interference**

Fr: détournement

hire or reward

Any payment, consideration, gratuity or benefit directly or indirectly charged, demanded, received or collected by any person for the use of an aircraft.

Fr: rémunération

HIRO

Abbreviation for: **high-intensity runway operations**

Fr: HIRO

HIWAS

U.S.: Abbreviation for: **Hazardous Inflight Weather Advisory Service**

HLA

Abbreviation for: **high level airspace**

Fr: HLA

holding area

The airspace to be protected for holding aircraft in accordance with ATC holding criteria.

Fr: zone d'attente

holding fix

A specified location, identified by visual or other means, in the vicinity of which the position of an aircraft in flight is maintained in accordance with ATC clearances.

Fr: repère d'attente

holding pattern

(1) A predetermined racetrack pattern flown as part of a holding procedure.

Fr: circuit d'attente

(2) U.S.: Expression for: **holding procedure**

holding point

ICAO: Expression for: **holding fix**

“holding point”

ICAO: Expression used in radiocommunications to designate the runway-holding position.

• see: **runway-holding position**

Fr: « point d'attente »

holding procedure

A predetermined manoeuvre that keeps an aircraft within a specified airspace while it awaits further clearance.

Fr: procédure d'attente

holding stack

A number of aircraft holding at a common fix with vertical separation.

• also called: stack

Fr: pile d'attente

“Hold short”

Instructions to hold at least 200 ft from the edge of a runway while awaiting permission to cross or proceed onto a runway, unless other holding positions are established by the aerodrome operator.

Fr: « Attendez à l'écart »

homing

(1) The procedure of using the direction-finding equipment of one radio station with the emission of another radio station, where at least one of the stations is mobile, and whereby the mobile station proceeds continuously towards the other station.

Fr: radioralliement

(2) U.S.: Flight towards a NAVAID, without correcting for wind, by adjusting the aircraft heading to maintain a relative bearing of zero degrees.

hot spot

A location on an aerodrome movement area with a high risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

Fr: point chaud

hover check

An expression used to describe the situation when a helicopter or vertical takeoff and landing aircraft (VTOL) requires a stabilized hover to conduct a performance or power check prior to hover taxi, air taxi or takeoff. The altitude of the hover will vary based on the purpose of the check.

Fr: vérification en vol stationnaire

hover taxi

U.S. and Canada: The movement of a helicopter or vertical takeoff and landing aircraft (VTOL) above the surface of an aerodrome and in ground effect at airspeeds less than approximately 20 kt.

• see also: **air taxi**

Note: One of the two terms encompassed by ICAO's term ***air-taxiing***

Fr: circulation près du sol

“How do you read?”

An expression used in radiocommunication meaning “What is the readability of my transmission?”

Fr: « Comment recevez-vous? »

4.10 – I –**IAF**

Abbreviation for: **initial approach fix**
Fr: IAF

IAP

Canada: Abbreviation for: **instrument approach procedure**
Fr: IAP

IAS

Abbreviation for: **indicated airspeed**
Fr: IAS

IAWP

Abbreviation for: **initial approach waypoint**
Fr: IAWP

ICAO

Abbreviation for: **International Civil Aviation Organization**
Fr: OACI

ICAO 3LD

Abbreviation for: **ICAO three-letter designator**
Fr: 3LD de l'OACI

ICAO three-letter designator

An exclusive designator that, when used together with a flight number, becomes the aircraft call sign and provides distinct aircraft identification to ATC.

Note: A telephony designator associated with an ICAO 3LD is used for radio communication.

- abbreviation: ICAO 3LD
- also called: three-letter designator (3LD)

Fr: indicatif à trois lettres de l'OACI

icing conditions

Weather conditions conducive to the formation of ice on an aircraft in flight. These conditions are usually characterized by visible moisture in the air and temperatures around the freezing level. Pilots encountering icing conditions are urged to issue a pilot weather report (PIREP) immediately.

Fr: conditions de givrage

IF

Abbreviation for: **intermediate fix**
• see: **intermediate approach fix**
Fr: IF

IFR

Abbreviation for: **instrument flight rules**
Fr: IFR

IFR aircraft

An aircraft operated in accordance with instrument flight rules (IFR).
Fr: aéronef IFR

IFR control service

A service provided by ATC units including:

- (a) area control service; and
- (b) terminal control service.

Fr: service de contrôle IFR

IFR departure procedure

Other expression for: **instrument departure procedure**

IFR flight

A flight conducted in accordance with instrument flight rules (IFR).

Fr: vol IFR

IFR landing minimums

The minimums prescribed for landing a civil aircraft while using an instrument approach procedure (IAP).

- also called: landing minimums

Fr: minimums d'atterrissage IFR

IFR military training route

U.S.: Expression for: **low level tactical training route**

- abbreviation: IR

IFSS

Abbreviation for: **international flight service station**

Fr: IFSS

ILS

Abbreviation for: **instrument landing system**

Fr: ILS

ILS critical area

An area of defined dimensions in the vicinity of localizer (LOC) and glide path (GP) antenna arrays within which vehicle and aircraft operations may interfere with the radio signal transmitted by the ILS.

Fr: zone critique de l'ILS

ILS glide path angle

The angle between a straight line representing the mean of the ILS glide path (GP) and the horizontal.

Fr: angle de site de l'alignement de descente ILS

ILS reference datum

A point at a specified height that is located vertically above the intersection of the runway centreline and the threshold and through which the downward extended straight portion of the glide path (GP) passes.

Fr: point de référence ILS

IM

U.S.: Abbreviation for: **inner marker**

Fr: IM

IMC

Abbreviation for: **instrument meteorological conditions**

Fr: IMC

“... immediately”

An expression used by ATS when immediate compliance with an instruction is required to avoid imminent danger.

Fr: « ... immédiatement »

immediate takeoff

An expression used by ATC to indicate that the pilot is expected to taxi onto the runway and take off in one continuous movement.

- also called: rolling takeoff

Fr: décollage immédiat

INCERFA

ICAO: Abbreviation for: **uncertainty phase**

Fr: INCERFA

indicated airspeed

The uncorrected reading on the airspeed indicator.

- abbreviation: IAS
- also called: airspeed

Fr: vitesse indiquée

indicated altitude

The altitude as shown by an altimeter. On a pressure or barometric altimeter, it is altitude as shown uncorrected for instrument error and uncompensated for variation from standard atmospheric conditions.

- also called: altitude

Fr: altitude indiquée

INF

Abbreviation for: **inland navigation fix**

Fr: INF

in-flight meteorological information

Specific meteorological information provided to international air traffic.

- also called: VOLMET, meteorological information for aircraft in flight

Fr: renseignements météorologiques destinés aux aéronefs en vol

in-flight refuelling

Other expression for: **air refuelling** (AIRFL)

in-flight report

Other expression for: **air report** (AIREP)

information request

A message requesting that a communications search be carried out in a defined area utilizing government circuits and local telephone.

- abbreviation: INREQ

Fr: demande de renseignements

information service

An ATS consisting of the following:

- (a) aircraft movement information service (AMIS);
- (b) alerting service; and
- (c) flight information service (FIS).

Fr: service d'information

initial

DND: A point 3 to 5 mi. prior to the threshold on the upwind leg, and usually 500 ft above the normal aerodrome traffic circuit, where military aircraft join the aerodrome traffic circuit to conduct an overhead break.

Fr: point initial

initial approach

Canada: Other expression for: **initial approach segment (1)**

initial approach fix

The fix of an instrument approach procedure (IAP) at which the aircraft leaves the en-route phase of operations to commence the approach.

- abbreviation: IAF

Fr: repère d'approche initiale

initial approach segment

(1) Canada: That part of an instrument approach procedure (IAP) between the initial approach fix (IAF) or waypoint and the intermediate approach fix (IF) or waypoint during which the aircraft departs the en-route phase of flight and manoeuvres to enter the intermediate segment.

- also called: initial approach

Fr: segment d'approche initiale

(2) ICAO: That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point.

Fr: segment d'approche initiale

initial approach waypoint

The waypoint of an instrument approach procedure (IAP) at which the aircraft leaves the en-route phase of operations to commence the approach.

- abbreviation: IAWP

- see also: **instrument approach waypoints**

Fr: point de cheminement d'approche initiale

initial climb

The portion of flight operation between takeoff and the initial cruising altitude.

- also called: climbout

Fr: montée initiale

initial contact

The initial voice contact between a facility and an aircraft, using the identification of the unit being called and the unit initiating the call.

Fr: contact initial

initial point

On the H-hour control line, the point at which the faked route portion of the exercise begins.

- abbreviation: IP

Fr: point initial

inland navigation fix

A fix on a North American route (NAR) at which the common route or the non-common route begins or ends.

- abbreviation: INF

Fr: repère de navigation intérieure

inner marker

U.S.: A marker beacon used with an instrument landing system (ILS) (CAT II) precision approach located between the middle marker and the end of the ILS runway, transmitting a radiation pattern keyed at six dots per second and indicating to the pilot, both aurally and visually, that he/she is at the designated decision height (DH), normally 100 ft above the touchdown zone elevation, on the ILS CAT II approach. It also marks progress during a CAT III approach.

- abbreviation: IM
- also called: inner marker beacon

inner marker beacon

U.S.: Other expression for: **inner marker (IM)**

INREQ

Abbreviation for: **information request**

Fr: INREQ

instrument approach

Other expression for: **instrument approach procedure (IAP)**

instrument approach chart

An aeronautical chart that depicts the aeronautical data required to execute an instrument approach procedure (IAP) to an airport. These charts depict the procedures, including all related data, and the airport diagram. Each procedure is designated for use with a specific type of electronic navigation system, including non-directional beacon (NDB), tactical air navigation system (TACAN), VHF omnidirectional range (VOR), instrument landing system (ILS)/microwave landing system (MLS), and area navigation (RNAV). These charts are identified by the type of NAVAID providing final approach guidance.

Fr: carte d'approche aux instruments

instrument approach procedure

A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply.

- abbreviation: IAP
 - also called: instrument approach
- Fr: procédure d'approche aux instruments*

instrument approach waypoints

Geographic positions, given in degrees of latitude and longitude, used in defining instrument approach procedures (IAP). Waypoints may be coded in aircraft navigation data bases and depicted on instrument approach charts as either fly-by waypoints (turn anticipation permitted) or fly-over waypoints (turn anticipation not permitted). Waypoints that define the missed approach point (MAP) and the missed approach holding waypoint (MAHWP) shall be coded as fly-over waypoints.

- see also: **final approach course fix (FACF)**, **final approach waypoint (FAWP)**, **fly-by waypoint, fly-over waypoint, initial approach waypoint (IAWP)**, **intermediate approach waypoint (IWP)**, **missed approach holding waypoint (MAHWP)**, **missed approach turning waypoint (MATWP)**, **missed approach waypoint (MAWP)**, and **downwind termination waypoint (DTW)**

Fr: points de cheminement d'approche aux instruments

instrument departure procedure

A flight procedure followed by aircraft operating under IFR immediately after takeoff from an aerodrome and published for pilot/controller use in graphic or textual form.

- also called: IFR departure procedure

- see also: **obstacle departure procedure** (ODP) and **standard instrument departure** (SID)

Note: There are two types of instrument departure procedures: obstacle departure procedure (ODP) and standard instrument departure (SID).

Fr: procédure de départ aux instruments

instrument flight conditions

Restricted meteorological conditions in which control of an aircraft in flight (other than a balloon) is required to be maintained solely by reference to aircraft flight instruments.

Fr: conditions de vol aux instruments

instrument flight rules

A set of rules governing the conduct of flight under instrument meteorological conditions (IMC).

- abbreviation: IFR

Fr: règles de vol aux instruments

instrument landing system

A radionavigation precision-approach system that provides aircraft with horizontal and vertical guidance just before and during landing and that, at certain fixed points, indicates the distance to the reference point of landing.

- abbreviation: ILS

Fr: système d'atterrissage aux instruments

instrument meteorological conditions

(1) Canada: Meteorological conditions less than the minima specified in Subpart 602 of the *Canadian Aviation Regulations* (CARs) for visual meteorological conditions (VMC), expressed in terms of visibility and distance from cloud.

- abbreviation: IMC

Fr: conditions météorologiques de vol aux instruments

(2) ICAO and U.S.: Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling less than the minima specified for visual meteorological conditions.

- abbreviation: IMC

Fr: conditions météorologiques de vol aux instruments

instrument runway

A runway intended for the operation of aircraft making a precision or non-precision instrument approach.

Fr: piste aux instruments

intended runway

A runway at an aerodrome intended by a pilot for landing or departing.

Fr: piste prévue

intentional fuel venting

ICAO: Expression for: **fuel dumping**

intermediate approach

Canada: Other expression for: **intermediate approach segment (1)**

intermediate approach fix

The fix at which an aircraft enters the intermediate approach segment of an instrument approach procedure (IAP).

- abbreviation: IF

- also called: intermediate fix

Fr: repère d'approche intermédiaire

intermediate approach segment

(1) Canada: That part of an instrument approach procedure (IAP) between the intermediate approach fix (IF) or waypoint and the final approach fix (FAF), waypoint or point, or between the end of a track reversal, racetrack or dead-reckoning track procedure and the FAF, waypoint or point, as appropriate. It is in this part of the procedure that aircraft configuration, speed and positioning adjustments are made for entry into the final approach segment.

- also called: intermediate approach

Fr: segment d'approche intermédiaire

(2) ICAO: That segment of an instrument approach procedure between either the intermediate approach fix and the final approach fix or point, or between the end of a reversal, racetrack or dead reckoning track procedure and the final approach fix or point, as appropriate.

Fr: segment d'approche intermédiaire

intermediate approach waypoint

The waypoint at which an aircraft enters the intermediate approach segment of an instrument approach procedure (IAP).

- abbreviation: IWP
- also called: intermediate waypoint
- see also: **instrument approach waypoints**

Fr: point de cheminement d'approche intermédiaire

intermediate fix

Other expression for: **intermediate approach fix**

intermediate holding position

A designated position intended for traffic control at which taxiing aircraft and vehicles stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.

Fr: point d'attente intermédiaire

intermediate waypoint

Other expression for: **intermediate approach waypoint**

international airport

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

Fr: aéroport international

International Civil Aviation Organization

A specialized agency of the United Nations, the objective of which is to develop the principles and techniques of international air navigation and to foster planning and development of international civil air transport.

- abbreviation: ICAO

Fr: Organisation de l'aviation civile internationale

international flight service station

Canada: The Gander aeronautical station that mainly provides communication and information service for international flights.

- abbreviation: IFSS

Fr: station d'information de vol internationale

interrogator

A ground-based secondary surveillance system (SSR) transmitter.

Fr: interrogateur

intersecting runways

Two or more runways that cross or meet within their lengths.

Fr: pistes sécantes

intersection

As the circumstances require, this may be

- (a) a point on the surface of the earth over which two or more position lines intersect. The position lines may be true bearings from non-directional beacons (NDB) (magnetic bearings shown on charts for pilot usage); radials from VHF/UHF NAVAIDs; centrelines of airways, fixed RNAV routes or air routes; localizers; or DME distances; or
- (b) the point where two runways, a runway and a taxiway, or two taxiways cross or meet.

- abbreviation: INTXN

Fr: intersection

intersection departure

A departure on a runway from an intersection.

Fr: départ à partir d'une intersection

INTXN

Abbreviation for: **intersection**

Fr: INTXN

IP

Abbreviation for: **initial point**

Fr: IP

IR

U.S.: Abbreviation for: **IFR military training route**

- see: **low level tactical training route**

“I say again”

An expression used in radiocommunication meaning “I repeat for clarity or emphasis.”

- see also: **“Say again”**

Fr: « Je répète »

itinerant aircraft

An aircraft that

- (a) is proceeding to or arriving from another location; or
- (b) leaves the aerodrome traffic circuit but will be returning to land.

Fr: aéronef itinérant

IWP

Abbreviation for: **intermediate approach waypoint**

Fr: IWP

4.11 – J –

J

(1) The letter used on aeronautical charts to indicate a high level airway (e.g. J500).

Fr: J

(2) U.S.: Abbreviation for: **jet route**

- see: **high level airway**

James Brake Index

An index that is used at Canadian military aerodromes to report the runway coefficient of friction. It is determined via a vehicle-mounted decelerometer with a scale that is graduated in increments from 0 to 1. Small numbers represent low braking coefficients of friction while numbers on the order of 0.8 and above indicate the braking coefficients to be expected on bare and dry runways. JBI charts may be found in the Military Flight Data and Procedures section of the *Canada Flight Supplement* (CFS).

- abbreviation: JBI

- see also: **Canadian Runway Friction Index** (CRFI)

Fr: indice de décélération James

jamming

Electronic or mechanical interference that may disrupt the display of aircraft on radar or the transmission or reception of radio communication or radio navigation signals.

Fr: brouillage

JBI

Abbreviation for: **James Brake Index**

Fr: JBI

jet blast

Jet-engine exhaust.

Fr: souffle de réacteur

jet route

U.S.: Expression for: **high level airway**

- abbreviation: J

jet stream

Flat tubular, quasi-horizontal, current of air generally near the tropopause, whose axis is along a line of maximum speed and which is characterized by great speeds and strong vertical and horizontal wind shears (WS).

Fr: courant-jet

jettisoning of external stores

The airborne release of external stores, e.g. tip tanks, ordnance.

- see also: **fuel dumping**

Fr: largage d'équipement externe

joint rescue coordination centre

A unit responsible for promoting efficient organization of both aeronautical and maritime search and rescue services and for coordinating the conduct of both aeronautical and maritime search and rescue operations, within a search and rescue region.

- abbreviation: JRCC

Fr: centre conjoint de coordination de sauvetage

joint use restricted area

U.S.: Expression for: **restricted area**

JRCC

Abbreviation for: **joint rescue coordination centre**

Fr: JRCC

4.12 – K –

known aircraft

An aircraft of whose movements ATS has been informed.

- also called: known traffic

Fr: *aéronef connu*

known traffic

Other expression for: **known aircraft**

4.13 – L –

LAAS

- (1) U.S. and Canada: Abbreviation for: **local area augmentation system**
Fr: LAAS
- (2) U.S.: Abbreviation for: **low altitude alert system**

LAHSO

Abbreviation for: **Land and Hold Short Operations**
Fr: LAHSO

Land and Hold Short Operations

Operations that include simultaneous takeoffs and landings and/or simultaneous landings when a landing aircraft is able and is instructed by the controller to hold short of the intersecting runway/taxiway or designated hold-short point.

- abbreviation: LAHSO

Note: This term replaces the term **Simultaneous Intersecting Runway Operations (SIRO)**.

Fr: atterrissage et attente à l'écart

land-based ADIZ

U.S.: Other expression for: **land-based air defense identification zone**

land-based air defense identification zone

U.S.: An ADIZ over U.S. metropolitan areas, which is activated and deactivated as needed, with dimensions, activation dates, and other relevant information disseminated via NOTAM.

- also called: land-based ADIZ
- see also: **air defense identification zone (ADIZ)**

landing

- (1) In respect of an aircraft, the act of coming into contact with a supporting surface and the immediately preceding and following acts.
Fr: atterrissage
- (2) In respect of an airship or free balloon, the act of bringing the airship or balloon under restraint and the immediately preceding and following acts.
Fr: atterrissage

landing area

The part of a movement area intended for the landing or takeoff of aircraft.
Fr: aire d'atterrissage

landing distance available

The length of runway that is declared available and suitable for the ground run of an aircraft landing.
• abbreviation: LDA
Fr: distance d'atterrissage utilisable

landing minimums

Other expression for: **IFR landing minimums**

landing roll

Other expression for: **landing run**

landing run

The distance from the touchdown point to the point where the aircraft can be brought to a stop or exit the runway.
• also called: landing roll
Fr: course à l'atterrissage

landing sequence

The order in which aircraft are positioned for landing.

Fr: séquence d'atterrissage

“Large”

U.S.: For the purposes of wake turbulence separation minima, an expression used by ATC to classify an aircraft of more than 41 000 lb maximum certificated takeoff weight, up to but not including 300 000 lb.

- see also: **“Heavy”**, **light aircraft**, **medium aircraft**, **“Small”**, **“Super”**, and **wake turbulence**

laser attack

The intentional or unintentional projection of a laser beam that strikes an aircraft during any phase of flight or ground operation.

- see also: **directed bright light source**

Fr: attaque laser

last assigned altitude

The last altitude or flight level (FL) assigned by ATC and acknowledged by the pilot.

Fr: dernière altitude assignée

lateral navigation

(1) Canada: An RNAV function that calculates, displays and provides horizontal approach navigation without approved vertical guidance.

- abbreviation: LNAV

- see also: **approach procedure with vertical guidance (APV)**, **barometric vertical navigation (baro-VNAV)**, **localizer performance with vertical guidance (LPV)**, **localizer performance without vertical guidance (LP)**, and **vertical navigation (VNAV)**

Fr: navigation latérale

(2) U.S.: A function of area navigation (RNAV) equipment that calculates, displays and provides lateral guidance to a profile or path.

lateral navigation/vertical navigation

Other expression for: **barometric vertical navigation (baro-VNAV)**

- abbreviation: LNAV/VNAV

lateral separation

The separation between aircraft at the same altitude expressed in terms of distance or angular displacement between tracks.

Fr: espacement latéral

LDA

(1) Abbreviation for: **landing distance available**

Fr: LDA

(2) U.S.: Abbreviation for: **localizer type directional aid**

LDIN

Canada: Abbreviation for: **runway lead-in lighting system**

Fr: LDIN

lee wave

Other expression for: **mountain wave (MTW)**

- abbreviation: LEE WV

LEE WV

Abbreviation for: **lee wave**

- see: **mountain wave** (MTW)

level

The vertical position of an aircraft in flight and variously height, altitude or flight level (FL).

- abbreviation: LVL

Fr: niveau

LF

Abbreviation for: **low frequency**

Fr: LF

light aircraft

In respect of aircraft wake turbulence weight categories, an aircraft certificated for a maximum take-off weight of 7000 kg (15 500 lb) or less.

- see also: “**Heavy**”, “**Large**”, **medium aircraft**, “**Small**”, “**Super**”, and **wake turbulence**

Fr: aéronef léger

lighter-than-air aircraft

An aircraft supported in the atmosphere by its buoyancy.

Fr: aérostat

light gun

A hand-held directional light signalling device that emits a brilliant, narrow beam of white, green or red light, as selected by the tower controller. The light gun is used as an alternate means of communication for controlling traffic operating in the vicinity of the airport and on the airport movement area.

Fr: projecteur directif

light icing

An atmospheric condition in which the rate of ice accumulation may create a problem if flight is prolonged in this environment for over one hour.

- see also: **trace icing**, **moderate icing**, and **severe icing**

Fr: givrage léger

limited weather information system

An automated weather system that produces an hourly report containing wind speed and direction, temperature, dew point, and altimeter setting.

- abbreviation: LWIS

Fr: système d'information météorologique limitée

“Line up . . .”

ICAO and Canada: Expression used in radiocommunications to instruct a pilot to enter the runway intended for takeoff.

Note: Used in conjunction with a runway.

Fr: « Aligned-vous... »

“Line up and wait . . .”

ICAO and Canada: Expression used in radiocommunications to instruct a pilot to enter the runway intended for takeoff and to wait.

Note: Used in conjunction with a runway, and the reason for the delay if it is not obvious.

Fr: « Aligned-vous et attendez... »

LL

U.S.: Abbreviation for: **lost link**

LLA

Abbreviation for: **low level airspace**

Fr: LLA

LLWS

Abbreviation for: **low-level wind shear**
Fr: LLWS

LLZ

ICAO: Abbreviation for: **localizer**
Fr: LLZ

LNAV

Abbreviation for: **lateral navigation**
Fr: LNAV

LNAV/VNAV

Abbreviation for: **lateral navigation/vertical navigation**
 • see: **barometric vertical navigation** (baro-VNAV)
Fr: LNAV/VNAV

LOC

Abbreviation for: **localizer**
Fr: LOC

local aircraft

An aircraft that remains in the aerodrome traffic circuit.
Fr: aéronef local

local area augmentation system

U.S. and Canada: An augmentation system used to meet precision approach CAT I, CAT II and CAT III accuracy, integrity, continuity and availability requirements.
 • abbreviation: LAAS
 • see also : **wide area augmentation system** (WAAS)
Fr: système de renforcement à couverture locale

localizer

The component of an instrument landing system (ILS) that provides lateral guidance with respect to the runway centreline.
 • abbreviation: LOC
Fr: radiophare d'alignement de piste

localizer performance with vertical guidance

(1) U.S. and Canada: An APV requiring WAAS, using a final approach segment (FAS) data block, that computes, displays and provides both horizontal and approved vertical approach navigation to minimums as low as a 200-ft ceiling and ½ mile visibility.
 (2) ICAO: The label to denote minima lines associated with APV-I or APV-II performance on approach charts.
 • abbreviation: LPV
 • see also: **approach procedure with vertical guidance** (APV), **barometric vertical navigation** (baro-VNAV), **lateral navigation** (LNAV), **localizer performance without vertical guidance** (LP), and **vertical navigation** (VNAV)
Fr: performance d'alignement de piste avec guidage vertical

localizer performance without vertical guidance

A non-precision approach requiring WAAS, using a final approach segment (FAS) data block that computes, displays and provides horizontal approach navigation using the horizontal accuracy and integrity of LPV without approved vertical guidance.
 • abbreviation: LP

- see also: **approach procedure with vertical guidance (APV)**, **barometric vertical navigation (baro-VNAV)**, **lateral navigation (LNAV)**, **localizer performance with vertical guidance (LPV)**, and **vertical navigation (VNAV)**

Fr: performance d'alignement de piste sans guidage vertical

localizer type directional aid

U.S.: A NAVAID which is used for nonprecision [sic] instrument approaches with utility and accuracy comparable to a localizer but which is not a part of a complete instrument landing system (ILS) and is not aligned with the runway.

- abbreviation: LDA

localizer usable distance

The maximum distance from the localizer transmitter at a specified altitude, as verified by flight inspection, at which reliable course information is continuously received.

Fr: distance maximale de réception du radiophare d'alignement de piste

local traffic

Aircraft operating in the aerodrome traffic circuit or within sight of an ATS unit; aircraft known to be departing for or arriving from flight in local practice areas; or aircraft executing simulated approaches at the aerodrome.

Fr: trafic local

location indicator

A four-letter code group formulated in accordance with rules prescribed by ICAO and assigned to the location of an aeronautical fixed station.

Fr: indicateur d'emplacement

longitudinal separation

Separation between aircraft at the same altitude, expressed in units of time or distance along track.

Fr: espacement longitudinal

long radius exit

Other expression for: **high speed taxiway**

long range air navigation

An electronic navigational system by which hyperbolic lines of position are determined by measuring the difference in the time of reception of synchronized pulse signals from two fixed transmitters. LORAN A operates in the 1750-1950 kHz frequency band. LORAN C and D operate in the 90–110 kHz frequency band.

- abbreviation: LORAN

Fr: navigation aérienne longue portée

LORAN

Abbreviation for: **long range air navigation**

Fr: LORAN

loss of separation

An occurrence in which less than the authorized minimum existed or in which the minimum was not assured.

Fr: perte d'espacement

lost command and control link

Other expression for: **lost link**

lost C2 link

Other expression for: **lost link**

lost link

A loss of the command and control (C2) link contact with the control station (uplink) and/or data (downlink) from the remotely piloted aircraft (RPA) such that the remote pilot can no longer manage the aircraft's flight.

Note: As a result of the lost link, the RPA will perform a predictable or planned manoeuvre.

- also called: lost command and control link, lost C2 link
- see also: **command and control link, control station, flyaway, lost-link procedure, and remotely piloted aircraft (RPA)**

Fr: perte de liaison

lost-link procedure

A set of preprogrammed or predetermined mitigations aimed at ensuring the continued safe operation of the remotely piloted aircraft (RPA) in the event of a lost link and requiring flight termination in the event that a positive link cannot be established.

- see also: **command and control link, control station, flyaway, lost link, and remotely piloted aircraft (RPA)**

Fr: procédure en cas de perte de liaison

low altitude alert system

U.S.: An automated function of the TPX-42 that alerts the controller when a Mode C transponder-equipped aircraft on an IFR flight plan (FP) is below a predetermined minimum safe altitude. If requested by the pilot, LAAS monitoring is also available to VFR Mode C transponder-equipped aircraft.

- abbreviation: LAAS

low approach

An approach over an airport or runway following an instrument approach procedure (IAP) or VFR approach, including the overshoot manoeuvre, where the pilot intentionally does not make contact with the runway.

Fr: approche basse altitude

low frequency

The frequency band between 30 and 300 kHz.

- abbreviation: LF

Fr: basse fréquence

low level air route

Within low level uncontrolled airspace, a route extending upwards from the surface of the earth and for which ATC service is not provided.

Fr: route aérienne de l'espace inférieur

low level airspace

All airspace within the Canadian Domestic Airspace (CDA) below 18 000 ft ASL.

- abbreviation: LLA

Fr: espace aérien inférieur

low level airway

Within controlled low level airspace, a route extending upwards from 2200 ft above the surface of the earth and for which ATC service is provided.

Fr: voie aérienne de l'espace inférieur

low level autorotation

An autorotation manoeuvre that commences at an altitude well below the aerodrome traffic circuit and that is used primarily for tactical military training.

Fr: autorotation à basse altitude

low level fixed RNAV route

In low level airspace, a prescribed area navigation track between specified fixes. For routes in controlled low level airspace, the airspace extending upwards from 2200 ft above the surface of the earth within the following specified boundaries:

- (a) The primary route width is 10 mi. on each side of the centreline prescribed for such a route.
- (b) The primary route boundary lines do not splay.

Fr: route RNAV fixe de l'espace aérien inférieur

low level tactical training route

A route used by the U.S. Department of Defense and Canadian DND units for the purpose of conducting low-altitude navigation and tactical training in both instrument meteorological conditions (IMC) and visual meteorological conditions (VMC) below 10 000 ft MSL at airspeeds in excess of 250 kt IAS.

Fr: route d'entraînement tactique à basse altitude

low-level wind shear

Wind shear along the final approach path or along the runway and the take-off and initial climb-out flight path.

- abbreviation: LLWS
- see also: **microburst** and **wind shear (WS)**

Fr: cisaillement du vent à basse altitude

low-visibility operations

Operations below RVR 1 200 (¼ SM).

- abbreviation: LVO
- see also: **low-visibility operations plan (LVOP)**, **low-visibility procedures (LVP)**, and **reduced-visibility operations (RVO)**

Fr: opérations par faible visibilité

low-visibility operations plan

A plan that calls for specific procedures established by the aerodrome operator and/or ATS when aerodrome visibility is below RVR 1 200 (¼ SM).

- abbreviation: LVOP
- see also: **low-visibility operations (LVO)**, **low-visibility procedures (LVP)**, and **reduced-visibility operations plan (RVOP)**

Fr: plan d'exploitation par faible visibilité

low-visibility procedures

Procedures that restrict aircraft and vehicle operations on the movement area of the airport when the runway visual range (RVR) is less than 1 200 ft.

Note: Procedures specified for an airport in the *Canada Air Pilot*.

- abbreviation: LVP
- see also: **low-visibility operations (LVO)** and **low-visibility operations plan (LVOP)**

Fr: procédures d'exploitation par faible visibilité

LP

Abbreviation for: **localizer performance without vertical guidance**

Fr: LP

LPV

Abbreviation for: **localizer performance with vertical guidance**

Fr: LPV

LVL

Abbreviation for: **level**

Fr: LVL

LVO

Abbreviation for: **low-visibility operations**

Fr: LVO

LVOP

Abbreviation for: **low-visibility operations plan**

Fr: LVOP

LVP

Abbreviation for: **low-visibility procedures**

Fr: LVP

LWIS

Abbreviation for: **limited weather information system**

Fr: LWIS

4.14 – M –

M

Abbreviation for: **Mach number**

Fr: M

MA

Abbreviation for: **missed approach**

Fr: MA

MAA

U.S.: Abbreviation for: **maximum authorized altitude**

Mach number

The ratio of the speed of an object to the local speed of sound.

- abbreviation: M

Fr: nombre de Mach

Mach number technique

The assignment by ATC of Mach number values to aircraft that are in level flight, climbing or descending, to ensure that longitudinal separation is maintained.

Fr: technique du nombre de Mach

MAHWP

Abbreviation for: **missed approach holding waypoint**

Fr: MAHWP

“Maintain . . .”

(1) Concerning altitude or flight level (FL), an expression meaning “Remain at level specified”.

Fr: « Maintenez... »

(2) Concerning other ATC instructions, the term is used in its literal sense; e.g., “Maintain VFR”.

Fr: « Maintenez... »

“Make short approach”

U.S.: Expression for: **“Tighten your approach”**

mandatory frequency

A very high frequency (VHF) specified in the *Canada Air Pilot (CAP)*, the *Canada Flight Supplement (CFS)* or the *Canada Water Aerodrome Supplement (CWAS)* for the use of radio-equipped aircraft operating within a mandatory frequency area.

- abbreviation: MF

Fr: fréquence obligatoire

mandatory frequency area

An area established at selected uncontrolled aerodromes within which aircraft are required to comply with mandatory-frequency reporting procedures.

- abbreviation: MF area

- see also: **common frequency area (CFA)**

Fr: zone d'utilisation de fréquence obligatoire

manoeuvring area

The part of an aerodrome, other than an apron, that is intended to be used for the takeoff and landing of aircraft and for the movement of aircraft associated with takeoff and landing.

Fr: aire de manœuvre

MANOT

Abbreviation for: **missing aircraft notice**

Fr: MANOT

MAP

(1) U.S. and Canada: Abbreviation for: **missed approach point**

Fr: MAP

(2) ICAO: Abbreviation for: aeronautical maps and charts

Fr: MAP

MAPt

ICAO: Abbreviation for: **missed approach point**

Fr: MAPt

MAPT

ICAO: Abbreviation for: **missed approach point**

Fr: MAPT

marker

An object of a conventional shape, flag, or painted sign displayed above ground level (AGL) for the purpose of indicating an obstacle or delineating a boundary.

Fr: balise

marker beacon

A transmitter in the aeronautical radionavigation service that radiates vertically a distinctive pattern to provide position information to aircraft.

Fr: radioborne

master minimum equipment list

A document established by the Minister pursuant to CAR 605.07(1) that enumerates the aircraft equipment that is allowed to be unserviceable for a specified type of aircraft under the conditions specified therein.

- abbreviation: MMEL
- see also: **minimum equipment list** (MEL)

Fr: liste principale d'équipement minimal

MATWP

Abbreviation for: **missed approach turning waypoint**

Fr: MATWP

MAWP

Abbreviation for: **missed approach waypoint**

Fr: MAWP

maximum authorized altitude

U.S.: A published altitude representing the maximum usable altitude or flight level (FL) for an airspace structure or route segment. It is the highest altitude on a Federal airway, jet route, area navigation low or high route, or other direct route for which a minimum en-route altitude (MEA) is designated in FAR 95 at which adequate reception of NAVAID signals is assured.

- abbreviation: MAA

“Mayday”

An expression meaning “I am in distress.” It is the international radiotelephony distress signal. Preferably spoken three times, it indicates imminent and grave danger and means that immediate assistance is requested.

Fr: « Mayday »

MBST

U.S. and ICAO: Abbreviation for: **microburst**

Fr: MBST

MCA

U.S.: Abbreviation for: **minimum crossing altitude**

MDA

Abbreviation for: **minimum descent altitude**

Fr: MDA

MEA

Abbreviation for: **minimum en-route altitude**

Fr: MEA

mean wind

The wind direction and speed as determined from a sample reading taken every second over a two-minute period.

Fr: vent moyen

MEDEVAC

(1) A term used to request ATS priority handling for a medical evacuation flight based on a medical emergency in the transport of patients, organ donors, organs or other urgently needed life-saving medical material.

Note: This term is used on flight plans (FP) and in radiotelephony communications if a pilot determines that a priority is required and is suffixed to the aircraft identification.

(2) DND: The movement of patients under medical supervision to or between medical treatment facilities.

Note: Medical evacuation includes the movement of patients, organ donors, organs or other life-saving material.

Fr: MEDEVAC

medium aircraft

In respect of aircraft wake turbulence weight categories, an aircraft certificated for a maximum take-off weight of more than 7000 kg (15 500 lb) but less than 136 000 kg (300 000 lb).

• see also: “**Heavy**”, “**Large**”, **light aircraft**, “**Small**”, “**Super**”, and **wake turbulence**

Fr: aéronef moyen

MEL

Abbreviation for: **minimum equipment list**

Fr: MEL

message

Any thought or idea expressed briefly in a plain, coded, or secret language and prepared in a form suitable for transmission by any means of communication.

• abbreviation: MSG

Fr: message

METAR

Abbreviation for: **aerodrome routine meteorological report**

Fr: METAR

meteorological bulletin

ICAO: A text comprising meteorological information preceded by an appropriate heading.

Fr: bulletin météorologique

meteorological information

Information supplied to operators and flight crew members that includes upper winds and upper air temperatures, significant en-route weather phenomena, meteorological reports, aerodrome forecasts,

forecasts for takeoff, landing forecasts, SIGMET and air reports that are available at the meteorological office and that are relevant to the planned flight operations.

- also called: weather information

Fr: renseignements météorologiques

meteorological information for aircraft in flight

Other expression for: **in-flight meteorological information**

meteorological office

An office designated to provide a meteorological service.

Fr: bureau météorologique

meteorological report

A statement of observed meteorological conditions relating to a specified time and location.

Fr: bulletin météorologique

metering

A method of time-regulating arrival traffic flow into a terminal area so as not to exceed a predetermined terminal acceptance rate.

Fr: minutage

metering fix

A fix along an established arrival route from over which aircraft will be metered prior to entering terminal airspace.

Fr: repère de minutage

metering time

The time at which an aircraft must depart a metering fix to meet an assigned arrival time.

Fr: heure de minutage

MF

Abbreviation for: **mandatory frequency**

Fr: MF

MF area

Abbreviation for: **mandatory frequency area**

Fr: zone MF

MFAU

Abbreviation for: **Military Flight Advisory Unit**

Fr: MFAU

MHA

Abbreviation for: **minimum holding altitude**

microburst

A convective downdraft with an affected outflow area less than 4 km wide and with peak winds lasting fewer than five minutes.

- see also: **low-level wind shear** (LLWS)

Fr: microrafale

microwave landing system

A precision instrument approach system operating in the microwave spectrum that normally consists of the following components:

- (a) azimuth station;
- (b) elevation station; and
- (c) precision distance measuring equipment (DME).

- abbreviation: MLS
Fr: système d'atterrissage hyperfréquences

middle marker

A marker beacon that defines a point along the glide path (GP) of an instrument landing system (ILS) normally located at or near the point of decision height (DH).

- abbreviation: MM
Fr: radioborne intermédiaire

Military Flight Advisory Unit

A military ground station established to provide en-route flight information, airport advisory, ground control, field condition reports, flight planning, alerting service, navigation assistance, NOTAMs, PIREPs and weather reports. An MFAU may be used to accept and relay VFR and IFR position reports and ATC clearances.

- abbreviation: MFAU
Fr: unité militaire de consultation en vol

military operations area

An airspace of defined dimensions established to segregate certain military activities from IFR traffic and to identify, for VFR traffic, where the activities are conducted.

- abbreviation: MOA
Fr: zone d'opérations militaires

military radar control unit

A military ATC facility established to provide ATC service using radar-derived information.

- abbreviation: MRCU
Fr: unité militaire de contrôle radar

military terminal control area

A controlled airspace of defined dimensions normally established in the vicinity of a military aerodrome and within which special procedures and exemptions exist for military aircraft. The terminology (Class B, C, D or E equivalent) used for the designations of MTCAs describes the equivalent level of service and operating rules for civilian aircraft operating within the MTCA and under military control.

- abbreviation: MTCA
Fr: région de contrôle terminal militaire

military terminal control unit

A system of control by surveillance and precision radar, consolidated into one specific military unit to provide radar traffic control service to IFR flights operating within a designated terminal control area (TCA).

- abbreviation: MTCU
Fr: unité militaire de contrôle terminal

military training route

An airspace of defined dimensions

- (a) that is established for the conduct of military training flights;
- (b) within which IFR or VFR aircraft may operate; and
- (c) that may be established in controlled or uncontrolled airspace, or both.

- abbreviation: MTR
Fr: route d'entraînement militaire

minimum crossing altitude

U.S.: The lowest altitude at certain fixes at which an aircraft must cross when proceeding in the direction of a higher minimum en-route IFR altitude (MEA).

- abbreviation: MCA

minimum descent altitude

The altitude above sea level (ASL) specified in the *Canada Air Pilot (CAP)* or the route and approach inventory for a non-precision approach, below which descent shall not be made until the required visual reference to continue the approach to land has been established.

- abbreviation: MDA

Fr: altitude minimale de descente

minimum en-route altitude

The altitude above sea level (ASL) between specified fixes on airways or air routes that assures acceptable navigational signal coverage and that meets the IFR obstacle clearance requirements.

Note: This altitude is published on aeronautical charts.

- abbreviation: MEA

Fr: altitude minimale en route

minimum en-route IFR altitude

U.S.: Expression for: **minimum en-route altitude (MEA)**

minimum equipment list

A document approved by the Minister pursuant to CAR 605.07(3) that authorizes an operator to operate an aircraft with aircraft equipment that is inoperative under the conditions specified therein and that may specify certain equipment that must be operative.

- abbreviation: MEL
- see also: **master minimum equipment list (MMEL)**

Fr: liste d'équipement minimal

minimum fuel

An expression used to inform ATC that an aircraft's fuel supply has reached a state that is sufficient to reach destination, provided that unexpected delays are not encountered.

Fr: carburant minimum

minimum holding altitude

The lowest altitude prescribed for a holding pattern that assures navigational signal coverage, communications, and meets obstacle clearance requirements.

- abbreviation: MHA

Fr: altitude minimale d'attente

minimum IFR altitude

The lowest IFR altitude established for use in a specific airspace. Depending on the airspace concerned, the minimum IFR altitude may be a minimum obstacle clearance altitude (MOCA), a minimum en-route altitude (MEA), a minimum sector altitude (MSA), a minimum vectoring altitude (MVA), a safe altitude 100 NM, an area minimum altitude (AMA), a transition altitude or a missed approach altitude. The minimum IFR altitude provides obstacle clearance but may or may not be within controlled airspace.

Fr: altitude IFR minimale

minimum navigation performance specifications

An expression used to designate specifications relating to the navigation performance capability of aircraft operating in specified portions of the airspace.

- abbreviation: MNPS

Fr: spécifications de performances minimales de navigation

minimum obstacle clearance altitude

The altitude above sea level (ASL) between specified fixes on airways or air routes that meets the IFR obstacle clearance requirements for the route segment in question.

Note: This altitude is published on aeronautical charts.

- abbreviation: MOCA

Fr: altitude minimale de franchissement d'obstacles

minimum reception altitude

When applied to a specific VHF/UHF intersection, the lowest altitude above sea level (ASL) at which acceptable navigational signal coverage is received to determine the intersection.

- abbreviation: MRA

Fr: altitude minimale de réception

minimum safe altitude

An altitude depicted on approach charts that provides at least 1000 ft of obstacle clearance for use within a specified distance from the navigation facility upon which a procedure is predicated.

Fr: altitude minimale de sécurité

minimum safe altitude warning

A function of certain ATC automated systems that is designed to alert radar controllers to existing or pending penetrations of a minimum safe altitude that is recognized by program parameters and requires immediate attention or action.

- abbreviation: MSAW

Fr: avertissement d'altitude minimale de sécurité

minimum safe speed

The minimum speed at which an aircraft may be operated without affecting its manoeuvring ability. This speed may vary depending on the aircraft type and configuration, or emergency conditions.

Fr: vitesse minimale de sécurité

minimum sector altitude

The lowest altitude that will provide a minimum clearance of 1000 ft under conditions of standard temperature and pressure above all objects located in an area contained within a sector of a circle with a 25 NM radius centred on a radio aid to navigation or a specified point.

- abbreviation: MSA

Fr: altitude minimale de secteur

minimum vectoring altitude

The lowest altitude for vectoring aircraft by ATC that meets obstacle clearance and radio coverage requirements in the airspace specified.

- abbreviation: MVA

Fr: altitude minimale de guidage

Minister

Subject to paragraph (b) of the *Aeronautics Act*,

- (a) the Minister of Transport or such other Minister as is designated by the Governor in Council as the Minister for the purposes of the *Aeronautics Act*; and
- (b) with respect to any matter relating to defence, including any matter relating to military personnel or a military aircraft, aerodrome or facility of Canada or a foreign state, the Minister of National Defence or, under the direction of the Minister of National Defence, the Chief of the Defence Staff appointed under the *National Defence Act*.

Fr: ministre

missed approach

Other expression for: **missed approach segment**

- abbreviation: MA

missed approach holding waypoint

The waypoint designated in the missed approach segment of an instrument approach procedure (IAP) to which the aircraft will automatically fly and, upon reaching the geographic position of the waypoint, enter a specified holding pattern.

- abbreviation: MAHWP

- see also: **instrument approach waypoints**

Fr: point de cheminement de circuit d'approche interrompue

missed approach point

The point on the final approach course that signifies the termination of the final approach and the commencement of the missed approach segment. It may be

- (a) the intersection of an electronic glide path (GP) with a decision height (DH);
- (b) a NAVAID located on the aerodrome;
- (c) a suitable fix (e.g. distance measuring equipment (DME)); or
- (d) a specified distance beyond the NAVAID or final approach fix (FAF), not to exceed the distance from that NAVAID or fix to the nearest boundary of the aerodrome.

- U.S. and Canada: abbreviation: MAP
- ICAO: abbreviation: MAPt or MAPT

Fr: point d'approche interrompue

missed approach procedure

The procedure that is to be followed after an instrument approach procedure (IAP) if, for any reason, a landing is not effected and that occurs normally

- (a) when the aircraft has descended to the decision height (DH), or has descended to the minimum descent altitude (MDA) and reached the missed approach point or waypoint, and has not established the required visual reference to land; or
- (b) when the aircraft is directed by ATC to pull up or to go around.

- see also: **“Execute missed approach”**

Fr: procédure d'approche interrompue

missed approach segment

That part of an instrument approach procedure (IAP) between the missed approach point (MAP), the missed approach waypoint (MAWP), or the point of arrival at decision height (DH), and the specified missed approach NAVAID, intersection, fix or waypoint, as appropriate, at the minimum IFR altitude. It is in this part of the approach procedure that the aircraft climbs and returns to the en-route structure or is positioned for holding or a subsequent approach. The route of flight and altitudes are depicted on instrument approach charts.

- also called: missed approach

Fr: segment d'approche interrompue

missed approach turning waypoint

The waypoint designated in the missed approach segment of an instrument approach procedure (IAP) to which the aircraft will automatically fly en route to the specified missed approach holding waypoint (MAHWP).

- abbreviation: MATWP
- see also: **instrument approach waypoints**

Fr: point de cheminement de virage d'approche interrompue

missed approach waypoint

The waypoint on the final approach course that signifies the termination of the final approach segment and the commencement of the missed approach segment. It is normally located at the threshold of the landing runway.

- abbreviation: MAWP
- see also: **instrument approach waypoints**

Fr: point de cheminement d'approche interrompue

missing aircraft notice

A message issued by a joint rescue coordination centre (JRCC) to ATS units, giving details of a missing aircraft.

- abbreviation: MANOT

Fr: avis relatif à un aéronef manquant

MLAT

Abbreviation for: **multilateration**

Fr: MLAT

MLAT system

Other expression for: **multilateration system** (MLAT)

MLS

Abbreviation for: **microwave landing system**

Fr: MLS

MM

Abbreviation for: **middle marker**

Fr: MM

MMEL

Abbreviation for: **master minimum equipment list**

Fr: MMEL

MNPS

Abbreviation for: **minimum navigation performance specifications**

Fr: MNPS

MOA

Abbreviation for: **military operations area**

Fr: MOA

MOCA

Abbreviation for: **minimum obstacle clearance altitude**

Fr: MOCA

mode

Other expression for: **SSR mode**

mode C transponder

A type of transponder with altitude-encoding capability.

Fr: transpondeur mode C

model aircraft

An aircraft, the total weight of which does not exceed 35 kg (77.2 lb), that is mechanically driven or launched into flight for recreational purposes, that is not designed to carry persons or other living creatures, and that must be within visual line of sight of the person operating it at all times during the flight.

• see also: **beyond visual line of sight** (BVLOS), **remotely piloted aircraft** (RPA), **remotely piloted aircraft system** (RPAS), **unmanned aircraft** (UA), **unmanned aircraft system** (UAS), **unmanned air vehicle** (UAV), and **visual line of sight** (VLOS)

Fr: modèle réduit d'aéronef

moderate icing

An atmospheric condition in which the rate of ice accumulation is such that even short encounters become potentially hazardous and the use of de-icing or anti-icing equipment or diversion is necessary.

• see also: **trace icing**, **light icing**, and **severe icing**

Fr: givrage modéré

mode S transponder

A type of transponder with data-link capability.

Fr: transpondeur mode S

“Monitor”

An expression used in radiocommunication meaning “Listen out on (frequency).”

Fr: « Restez à l'écoute »

morning civil twilight

Relative to the standard meridians of the time zones, the period of time that begins at the time specified by the Institute for National Measurement Standards of the National Research Council of Canada and ends at sunrise.

Note: Morning civil twilight begins in the morning when the centre of the sun's disc is 6 degrees below the horizon.

Fr: aube civile

mountainous region

An area of defined lateral dimensions above which special rules concerning minimum en-route altitudes apply.

Fr: région montagnaise

mountain wave

Oscillatory motion of the atmosphere which is induced by the wind flow over a mountain or a mountain chain and which forms over and to the lee side.

- abbreviation: MTW
- also called: lee wave

Fr: onde orographique

movement area

The part of an aerodrome that is intended to be used for the surface movement of aircraft and that includes the manoeuvring area and aprons.

Fr: aire de mouvement

MRA

Abbreviation for: **minimum reception altitude**

Fr: MRA

MRCU

Abbreviation for: **military radar control unit**

Fr: MRCU

MSA

(1) Abbreviation for: **minimum sector altitude**

Fr: MSA

(2) U.S.: Abbreviation for: **minimum safe altitude**

MSAW

Abbreviation for: **minimum safe altitude warning**

Fr: MSAW

MSG

Abbreviation for: **message**

Fr: MSG

MSL altitude

The altitude expressed in feet measured from mean sea level.

Fr: altitude MSL

MTCA

Abbreviation for: **military terminal control area**

Fr: MTCA

MTCU

Abbreviation for: **military terminal control unit**

Fr: MTCU

MTR

Abbreviation for: **military training route**

Fr: MTR

MTW

Abbreviation for: **mountain wave**

Fr: MTW

multilateration

An ATS surveillance method using time difference of arrival (TDOA) techniques to determine the position of an aircraft or vehicle.

- abbreviation: MLAT
- see also: **multilateration system** and **wide area multilateration (WAM)**

Fr: multilatération

multilateration system

A group of equipment configured to provide position derived from the secondary surveillance radar (SSR) transponder signals (replies or squitters) primarily using time difference of arrival (TDOA) techniques.

- also called: MLAT system
- see also: **multilateration** and **wide area multilateration (WAM)**

Fr: système de multilatération

multiple touch-and-gos

A procedure in which an aircraft makes more than one touch-and-go during a single pass along a runway.

- see also: **touch-and-go**

Fr: posés-décollés consécutifs

MVA

Abbreviation for: **minimum vectoring altitude**

Fr: MVA

4.15 – N –

NAD83

Abbreviation for: **North American Datum 1983**

Fr: NAD83

NAR

Abbreviation for: **North American Route**

- see: **North American Routes System** (NAR System)

Fr: NAR

NAR System

Abbreviation for: **North American Routes System**

Fr: réseau NAR

NAS

U.S.: Abbreviation for: **National Airspace System**

NAT

Abbreviation for: **North Atlantic**

Fr: NAT

NAT OTS

Abbreviation for: **North Atlantic organized track system**

Fr: NAT OTS

National Airspace System

U.S.: The common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and material. Included are system components shared jointly with the military.

- abbreviation: NAS

NAT Region

The region encompassing the northern portion of the Atlantic Ocean, as defined by ICAO.

Fr: Région NAT

NAVAID

Abbreviation for: **navigation aid**

Fr: NAVAID

NAV CANADA

The corporation providing air navigation services in Canadian airspace and ATS in international airspace for which Canada has assumed responsibility.

Fr: NAV CANADA

navigation aid

Any visual or electronic device, airborne, space-based, or on the surface of the earth, that provides point-to-point guidance information or position data to aircraft in flight.

- abbreviation: NAVAID
- also called: navigational aid

Fr: aide à la navigation

navigational aid

Other expression for: **navigation aid** (NAVAID)

navigation change-over point

Other expression for: **change-over point**

navigation specification

A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two types of navigation specification: RNAV specification and RNP specification.

- see also: **RNAV specification** and **RNP specification**

Fr: spécification de navigation

NCA

Abbreviation for: **Northern Control Area**

Fr: NCA

NDA

Abbreviation for: **Northern Domestic Airspace**

Fr: NDA

NDB

Abbreviation for: **non-directional beacon**

Fr: NDB

“Negative”

An expression used in radiocommunication meaning “No,” “Permission not granted,” or “That is not correct.”

Fr: « Négatif »

night

The period of time during any day that starts at the end of evening civil twilight and ends at the start of morning civil twilight.

Fr: nuit

night vision goggles

A binocular light intensification appliance worn by a pilot that enhances the pilot’s ability to maintain visual surface references at night.

- abbreviation: NVG
- see also: **enhanced flight vision system (EFVS)** and **night vision imaging system (NVIS)**

Fr: lunettes de vision nocturne

night vision imaging system

A system that uses image intensifier tubes to produce an enhanced image of a scene in light conditions too low for normal navigation and pilotage.

- abbreviation: NVIS
- see also: **enhanced flight vision system (EFVS)** and **night vision goggles (NVG)**

Fr: système d’imagerie de vision nocturne

no-compass approach

A radar approach or vector provided to a pilot when the compass or directional indicator is malfunctioning. Instead of providing the pilot with headings to be flown, the controller observes the radar track and issues the control instructions “Turn right,” “Turn left,” or “Stop turn,” as appropriate.

Fr: approche radar sans compas

no gyro approach

U.S.: Expression for: **no-compass approach**

noise abatement procedure

A procedure developed to ensure that the necessary safety of flight operations is maintained while exposure to noise on the ground is minimized.

Fr: procédure d'atténuation du bruit

non-ATS OI

Abbreviation for: **non-ATS operating irregularity**

Fr: IE non ATS

non-ATS operating irregularity

A situation that occurs when ATS are being provided and when a preliminary investigation indicates that a hazardous situation or loss of separation may have occurred and that ATS have not contributed to the situation.

- abbreviation: non-ATS OI

Fr: irrégularité d'exploitation non ATS

non-directional beacon

An LF/MF or UHF radio beacon transmitting non-directional signals whereby the pilot of an aircraft equipped with direction-finding equipment can determine his or her bearing to or from the radio beacon and "home" on or track to or from the station. When the radio beacon is installed in conjunction with the instrument landing system (ILS) marker, it is normally called a marker beacon.

- abbreviation: NDB
- see also: **radio beacon**

Fr: radiophare non directionnel

non-instrument runway

A runway intended for the operation of aircraft using visual approach procedures, or an instrument approach down to a height above aerodrome (HAA) or a height above touchdown zone elevation (HAT) not lower than 500 ft.

Fr: piste à vue

non-manoeuving area

The part of an aerodrome including aprons and all other adjacent areas where ATC aircraft control is not provided.

Fr: aire autre que l'aire de manoeuvre

non-precision approach procedure

An instrument approach procedure (IAP) in which only electronic azimuth information is provided. No electronic glide path (GP) information is provided and obstacle assessment in the final segment is based on minimum descent altitude (MDA).

Fr: procédure d'approche de non-précision

non-precision runway

A runway served by visual aids and non-visual NAVAIDs that provide at least lateral guidance adequate for approach down to a height above aerodrome(HAA)/height above touchdown (HAT) of 500 ft but not lower than 250 ft.

- see also: **precision runway**

Fr: piste de non-précision

non-radar route

A route on which an aircraft is able to determine its position, track and, consequently, the minimum IFR altitude without the benefit of radar information.

Fr: route non radar

non-radar separation

The separation used when aircraft position information is derived from sources other than radar.

Fr: espacement non radar

non-RVSM aircraft

An aircraft that does not meet reduced vertical separation minimum (RVSM) requirements for certification and/or for operator approval.

- see also: **RVSM aircraft**

Fr: aéronef non RVSM

non-standard formation

A formation flight for which, through prior arrangement with ATC, the flight leader has received approval for formation dimensions other than standard ones.

Fr: formation non standard

no radio

An expression describing an inability to communicate by radio owing to the absence or failure of radio equipment.

- abbreviation: NORDO

Fr: sans radio

NORDO

Abbreviation for: **no radio**

Fr: NORDO

normal operating zone

An airspace of defined dimensions, extending to either side of an instrument landing system (ILS) localizer centreline. Only the inner half of the normal operating zone is taken into account in independent approaches.

- abbreviation: NOZ

Fr: zone d'évolution normale

North American Datum 1983

The geodetic coordinate reference system used in Canada and the U.S. that allows the user to mathematically describe (in degrees of latitude and longitude) any position on the earth's surface. NAD83 uses North American ground stations as references.

Note: In Canada, NAD83 has been deemed to be equivalent to World Geodetic System 1984 for aviation purposes.

- abbreviation: NAD83

- see also: **World Geodetic System 1984 (WGS-84)**

Fr: Système de référence nord-américain de 1983

North American Route

Other expression for: **North American Routes System (NAR System)**

- abbreviation: NAR

North American Routes System

A special routing system consisting of routes located within the high level airspace established to facilitate control of the flow of international air traffic between the North Atlantic (NAT) and domestic airspace, as described in the "Planning" section of the *Canada Flight Supplement (CFS)*.

- abbreviation: NAR System

- also called: North American Route (NAR)

Fr: réseau de routes aériennes nord-américaines

North Atlantic organized track system

A variable track structure developed daily by appropriate Oceanic Area Control Centres (Gander [West] or Shanwick [East]) to create a series of minimum time tracks across the North Atlantic (NAT) taking into consideration weather, opposite direction traffic, danger areas, airspace reservations, usable NAVAIDs, aircraft volume and domestic routes.

- abbreviation: NAT OTS

Fr: système de routes organisées de l'Atlantique Nord

Northern Control Area

A controlled airspace within the Northern Domestic Airspace (NDA) at FL 230 and above.

- abbreviation: NCA

Fr: région de contrôle du Nord

Northern Domestic Airspace

As geographically delineated in the *Designated Airspace Handbook* (DAH), a subdivision of Canadian Domestic Airspace (CDA) commencing at the North Pole and extending southward to the northern limit of the Southern Domestic Airspace (SDA).

- abbreviation: NDA

Fr: espace aérien intérieur du Nord

North Warning System

A system that provides airspace surveillance and command and control capability for air defence identification over the northern approaches to the continent. It consists of 15 long-range radars (LRR) and 39 short-range radars (SRR) across the Canadian Arctic and Alaska. Systems deployed on Canadian territory are operated and maintained by Canada for the North American Aerospace Defence Command (NORAD) on behalf of Canada and the United States.

- abbreviation: NWS

Fr: Système d'alerte du Nord

NOTAM

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

Note: NOTAMs are distributed by teletype on the aeronautical fixed service (AFS) or by voice advisory using radio communications.

Fr: NOTAM

NOTAMJ

Other expression for: **RSC/CRFI NOTAM**

notice to airmen

U.S.: Expression for: **NOTAM**

no-transgression zone

A corridor of airspace of defined dimensions, located centrally between the two extended runway centrelines, where controller intervention is required to manoeuvre the non-blundering aircraft when the airspace is penetrated by an aircraft conducting a simultaneous approach to the adjacent parallel or near-parallel instrument runway.

- abbreviation: NTZ

Fr: zone de non-transgression

“... now”

An expression used by ATS when prompt compliance with an instruction is required.

Fr: « ... maintenant »

NOZ

Abbreviation for: **normal operating zone**

Fr: NOZ

NTZ

Abbreviation for: **no-transgression zone**

Fr: NTZ

NVG

Abbreviation for: **night vision goggles**

Fr: LVN or NVG

NVIS

Abbreviation for: **night vision imaging system**

Fr: SIVN

NWS

Abbreviation for: **North Warning System**

Fr: NWS

4.16 – O –

OBST

Abbreviation for: **obstacle**

Fr: OBST

obstacle

All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

- abbreviation: OBST
- also called: obstruction

Fr: obstacle

obstacle clearance altitude

The lowest altitude above the elevation of the relevant runway threshold or above the aerodrome elevation, as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

- abbreviation: OCA
- see also : **obstacle clearance height**

Note: Obstacle clearance altitude is referenced to mean sea level (MSL) and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approach procedures to the aerodrome elevation or the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation.

Note: For convenience, when both *obstacle clearance altitude* and *obstacle clearance height* are used, ICAO writes the expressions in the form “obstacle clearance altitude/height” and abbreviates them to “OCA/H”.

Fr: altitude de franchissement d’obstacles

obstacle clearance height

The lowest height above the elevation of the relevant runway threshold or above the aerodrome elevation, as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

- abbreviation: OCH
- see also : **obstacle clearance altitude**

Note: Obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approach procedures to the aerodrome elevation or the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation, and obstacle clearance altitude is referenced to mean sea level (MSL). An obstacle clearance height for a circling approach procedure is referenced to the aerodrome elevation.

Note: For convenience, when both *obstacle clearance altitude* and *obstacle clearance height* are used, ICAO writes the expressions in the form “obstacle clearance altitude/height” and abbreviates them to “OCA/H”.

Fr: hauteur de franchissement d’obstacles

obstacle clearance limit

The height above the aerodrome elevation below which the minimum prescribed vertical clearance cannot be maintained either on approach or in the event of a missed approach.

- abbreviation: OCL

Fr: hauteur limite de franchissement d’obstacles

obstacle departure procedure

A pilot-initiated preplanned IFR departure procedure published for pilot/controller use to provide obstacle clearance and a transition from an aerodrome to the appropriate en-route structure.

- abbreviation: ODP
- see also: **instrument departure procedure, standard instrument departure (SID), and visual climb over the airport (VCOA)**

Fr: procédure de départ avec obstacle

obstacle free zone

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

- abbreviation: OFZ

Fr: zone dégagée d'obstacles

obstacle light

A light or one of a group of lights, usually red or white, frequently mounted on a surface structure or natural terrain to warn pilots of the presence of an obstacle.

- also called: obstruction light

Fr: feu d'obstacle

obstacle limitation surface

A surface that establishes the limit to which objects may project into the airspace associated with an aerodrome, so that aircraft operations at the aerodrome may be conducted safely.

- abbreviation: OLS

Fr: surface de limitation d'obstacles

obstruction

Other expression for: **obstacle** (OBST)

obstruction light

Other expression for: **obstacle light**

OCA

- (1) Abbreviation for: **obstacle clearance altitude**

Fr: OCA

- (2) Abbreviation for: **oceanic control area**

Fr: OCA

OCD

Abbreviation for: **oceanic clearance delivery**

Fr: OCD

oceanic airspace

Airspace over the oceans of the world, considered international airspace, where line-of-sight communications or ATS surveillance are limited and air traffic control is provided using procedural control and procedural separation in accordance with ICAO standards.

Note: Responsibility for providing air traffic control service in this airspace is delegated to various countries, based generally upon geographic proximity and the availability of the required resources.

- see also: **oceanic control area** (OCA), **oceanic entry point** (OEP), and **oceanic exit point** (OEP)

Fr: espace aérien océanique

oceanic clearance delivery

A process whereby ATC issues a data link clearance to suitably equipped aircraft conducting eastbound oceanic flights and transiting the Gander domestic flight information region (FIR)/control area (CTA) before they enter the North Atlantic (NAT) region.

- abbreviation: OCD

- see also: **clearance acknowledgement** (CLA) and **request for clearance** (RCL)

Fr: délivrance des autorisations océaniques

oceanic control area

A controlled airspace extending upwards from specified limits over the high seas and over land.

- abbreviation: OCA

- see also: **oceanic airspace**, **oceanic entry point** (OEP), and **oceanic exit point** (OEP)

Fr: région de contrôle océanique

oceanic entry point

The point on an FIR boundary where an aircraft enters the first oceanic control area.

- abbreviation: OEP
- see also: **oceanic airspace**, **oceanic control area (OCA)**, and **oceanic exit point (OEP)**

Fr: point d'entrée océanique

oceanic exit point

The point on an FIR boundary where an aircraft leaves the last oceanic control area.

- abbreviation: OEP
- see also: **oceanic airspace**, **oceanic control area (OCA)**, and **oceanic entry point (OEP)**

Fr: point de sortie océanique

OCH

Abbreviation for: **obstacle clearance height**

Fr: OCH

OCL

Abbreviation for: **obstacle clearance limit**

Fr: OCL

ODALS

Abbreviation for: **omnidirectional approach lighting system**

Fr: ODALS

ODP

Abbreviation for: **obstacle departure procedure**

Fr: ODP

OEP

(1) Abbreviation for: **oceanic entry point**

Fr: OEP

(2) Abbreviation for: **oceanic exit point**

Fr: OEP

off-route vector

A vector provided by ATC that takes an aircraft off a previously assigned route. Altitudes assigned by ATC during such vectors provide the required obstacle clearance.

Fr: vecteur hors route

offset parallel runways

Runways with parallel centrelines but thresholds that are not aligned.

Fr: pistes parallèles décalées

OFZ

Abbreviation for: **obstacle free zone**

Fr: OFZ

OI

Abbreviation for: **operating irregularity**

Fr: IE

OLS

Abbreviation for: **obstacle limitation surface**

Fr: OLS

OM

Abbreviation for: **outer marker**

Fr: OM

omni facility

A VHF omnidirectional range (VOR), VORTAC or tactical air navigation system (TACAN) that provides azimuth information, expressed as radials in degrees from 000° to 359°.

Fr: installation omnidirectionnelle

omnidirectional approach lighting system

A configuration of seven omnidirectional, variable-intensity, sequenced flashing white lights providing circling, offset and straight-in visual guidance for non-precision approach runways.

- abbreviation: ODALS

Fr: dispositif lumineux d'approche omnidirectionnel

“on-course” indication

An indication on an instrument that provides the pilot with a visual means of determining that the aircraft is located on the centreline of a given navigational track, or an indication on a radar scope that an aircraft is on a given track.

Fr: indication « on-course »

one-way airway

Preferred IFR routes that are normally flown in one direction only.

Fr: voie aérienne à sens unique

operating irregularity

Other expression for: **ATS operating irregularity**

- abbreviation: OI

operating position

A position within a sector from which ATS are provided. There may be one or more operating positions within a sector.

Fr: poste d'exploitation

operations support specialist

Other expression for: **air traffic control operations support specialist**

- abbreviation: OSS

“Orbit”

An expression used by controllers when issuing an instruction to hold.

Fr: « Effectuez orbite »

originating unit

The unit from which the activated flight plan (FP) is forwarded to the destination unit.

Fr: unité d'origine

OSS

Abbreviation for: **operations support specialist**

- see: **air traffic control operations support specialist**

Fr: OSS

“Out”

An expression used in radiocommunication meaning “This exchange of transmissions is ended and no response is expected.”

Fr: « Terminé »

outer marker

An LF or VHF facility installed at the site of the outer marker of an instrument landing system (ILS).

- abbreviation: OM

Fr: radioborne extérieure

“Over”

An expression used in radiocommunication meaning “My transmission is ended, and I expect a response from you.”

Fr: « À vous »

overhead approach

U.S.: Expression for: **overhead break**

overhead break

A series of predetermined manoeuvres prescribed for the VFR arrival of military aircraft (often in formation) for their entry into the VFR aerodrome traffic circuit and for landing.

- also called: 360 overhead, flat break, pitch

Fr: dégagement à l'horizontale

overlay approach

Selected non-directional beacon (NDB), VHF omnidirectional range (VOR) or VHF omnidirectional range/distance measuring equipment (VOR/DME) non-precision approach that can be flown by global positioning system (GPS) equipped aircraft (suffix “G”).

Fr: approche de recouvrement

overrun

A type of runway excursion in which an aircraft exits the end of the runway, having failed to confine its takeoff, landing or ground manoeuvring to the runway.

- see also: **runway excursion** and **veer-off**

Fr: sortie en bout de piste

overshoot

(1) To pass beyond the limit of the runway or landing field when trying to land.

Fr: dépasser

(2) To pass beyond a specified location, airspace, or flight segment when in flight.

(3) Other expression for: **go-around**

owner

In respect of an aircraft,

- (a) the person in whose name the aircraft is registered;
- (b) a person in possession of the aircraft as purchaser under a conditional sale or hire-purchase agreement that reserves to the vendor the title to the aircraft until payment of the purchase price or the performance of certain conditions;
- (c) a person in possession of the aircraft as chattel mortgagor under a chattel mortgage; or
- (d) a person in possession of the aircraft under a bona fide lease or agreement of hire.

Fr: propriétaire

4.17 – P –

PAL

Abbreviation for: **peripheral station**

Fr: PAL

“PAN PAN”

The international radiotelephony urgency signal. Preferably spoken three times, it indicates a condition that concerns the safety of an aircraft or another vehicle, or of some person on board or within sight, but that does not require immediate assistance.

Fr: « PAN PAN »

PAPI

Abbreviation for: **precision approach path indicator**

Fr: PAPI

PAR

Abbreviation for: **precision approach radar**

Fr: PAR

paraglider

A rectangular parachute attached to a harness, designed for jumping from a high place.

Fr: parapente

parallel offset route

A parallel track to the left or right of the designated airway or route. Such routes are normally associated with area navigation (RNAV) operations.

Fr: route décalée parallèle

parallel runways

Two or more runways at the same airport whose centrelines are parallel. In addition to having a runway number, parallel runways are designated as “L” (left) and “R” (right) or, if three parallel runways exist, “L” (left), “C” (centre), and “R” (right).

Fr: pistes parallèles

participating aircraft

Aircraft that are engaged in and identified as being part of an air refuelling mission or a military activity being conducted or to be conducted under the auspices of an altitude reservation approval (ALTRV APVL).

Fr: aéronef participant

PAS

Abbreviation for: **private advisory station**

Fr: PAS

pattern

U.S.: Expression for: **circuit (2)**

• see: **aerodrome traffic circuit**

PATWAS

Abbreviation for: **pilots’ automatic telephone weather answering system**

Fr: PATWAS

pavement classification number

ICAO: A number expressing the bearing strength of a pavement for unrestricted operations.

Note: PCNs are expressed on a scale from approximately 5 (weakest pavements) to 110 (strongest pavements) and are linked to the pavement type and a standard subgrade category. Aircraft tire pressure

restrictions, where applicable, are contained within the PCN reporting code. The ICAO PCN system is the internationally approved and accepted method for the reporting of airport pavement bearing strengths. In Canada, the pavement load rating (PLR) chart for each airport reports bearing strength using both the ICAO PCN and the Canadian PLR code.

- abbreviation: PCN
- see also: **pavement load rating (PLR)**
Fr: numéro de classification de chaussée

pavement load rating

Canada: A number expressing the bearing strength of a pavement for unrestricted aircraft operations. PLRs are expressed on a scale from 1 (weakest pavements) to 12 (strongest pavements). Aircraft tire pressure restrictions, where applicable, are given in megapascals (MPa). The PLR system for reporting airport pavement bearing strength is used exclusively in Canada. For international reporting purposes, the PLR chart for each airport also reports bearing strength using the ICAO PCN code.

- abbreviation: PLR
- see also: **pavement classification number (PCN)**
Fr: indice de résistance de chaussée

PBN

Abbreviation for: **performance-based navigation**
Fr: PBN

PBS

Abbreviation for: **pilot briefing service**
Fr: PBS

PCL

U.S. and ICAO: Abbreviation for: **pilot-controlled lighting**
• see: **aircraft radio control of aerodrome lighting (ARCAL)**
Fr: PCL

PCN

ICAO: Abbreviation for: **pavement classification number**
Fr: PCN

PDC

Abbreviation for: **pre-departure clearance**
Fr: PDC

penetration turn

DND: An arrival procedure involving a turn or series of turns during descent from a cruising altitude that will position the aircraft for a landing during a high-level approach.

Fr: virage d'intégration

performance-based navigation

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

- abbreviation: PBN

Note: Performance requirements are expressed in navigation specifications in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation.

Fr: navigation fondée sur les performances

peripheral station

An unstaffed VHF/UHF transmitter/receiver facility used to facilitate direct contact between pilots and controllers. Sometimes these facilities are not equipped with emergency frequencies 121.5 MHz and 243.0 MHz.

- abbreviation: PAL
- Fr: station périphérique*

personal locator beacon

NATO: Expression for: **emergency locator transmitter (ELT)**

PFAF

U.S.: Abbreviation for: **precise final approach fix**

photo block

An area of Canadian Domestic Airspace (CDA), approximately 30 mi. by 40 mi. in lateral dimensions, that is charted to facilitate flight planning by photo survey operators and that is delineated by quadrangles based on a modified version of the National Topographic System.

Fr: bloc photo

PIC

Abbreviation for: **pilot-in-command**

pilot briefing

The provision of, or consultation on, meteorological and aeronautical information to assist pilots in pre-flight planning.

- also called: pre-flight pilot briefing
- see also: **pilot briefing service**

Fr: exposé au pilote

pilot briefing service

The provision of pilot briefings by an FIC.

- abbreviation: PBS
- see also: **pilot briefing**

Fr: service d'exposé au pilote

pilot-controlled lighting

U.S. and ICAO: Expression for: **aircraft radio control of aerodrome lighting (ARCAL)**

- abbreviation: PCL

pilot-in-command

(1) The pilot having responsibility and authority for the operation and safety of the aircraft during flight time.

- abbreviation: PIC
- also called: aircraft captain

Fr: commandant de bord

(2) DND: Expression for: **aircraft commander**

(3) ICAO:

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

(b) The pilot responsible for the operation and safety of the aircraft during flight time.

Fr: pilote commandant de bord

pilots' automatic telephone weather answering system

An automated telephone answering system providing up-to-date weather information to pilots.

- abbreviation: PATWAS

Fr: système téléphonique automatique de renseignements météorologiques pour les pilotes

pilot weather report

A report by a pilot pertaining to weather conditions encountered in flight.

- abbreviation: PIREP

Fr: compte rendu météorologique de pilote

PINSA

Abbreviation for: **point-in-space approach**

Fr: PINSA

PIREP

Abbreviation for: **pilot weather report**

Fr: PIREP

pitch

Other expression for: **overhead break**

PLR

Canada: Abbreviation for: **pavement load rating**

Fr: PLR

point-in-space approach

A helicopter instrument approach procedure (IAP) to a missed approach point (MAP) that is more than 2600 ft from an associated helicopter landing area.

- abbreviation: PINSA

Fr: approche vers un point dans l'espace

point of activation

The position, expressed by either a four-letter, four-digit geographical reference (GEOREF) or four-digit latitude and longitude coordinates, from which an aircraft departs or is estimated to be along its intended track.

Fr: point d'activation

polar route

A northbound or southbound route that enters or exits Canadian Domestic Airspace via designated Russian polar fixes located north of 75°N.

Note: Routes are defined as northbound when aircraft are flying a track of 315° clockwise to 045° and southbound when tracking 135° clockwise to 225°.

- also called: cross-polar route

Fr: route polaire

“ . . . position and hold ”

U.S. Expression for “**Line up and wait . . .**”

Note: Used in conjunction with a runway.

position report

A report over a known location as transmitted by an aircraft.

- also called: position reporting, progress report

Fr: compte rendu de position

position reporting

Other expression for: **position report**

positive target control

The operation of faker aircraft transponders on discrete Mode 3/A codes to satisfy air defence faker monitor and ATC requirements.

Fr: contrôle intégral d'objectif

power-back

An expression used to indicate the rearward taxi of an aircraft under its own engine power.

- see also: **taxi** and **push-back**

Fr: refoulement au moteur

powered glider

An aeroplane that, with engines shut off, has the flight characteristics of a glider.

Fr: planeur propulsé

PPR

Abbreviation for: **prior permission required**

Fr: PPR

PPS

Abbreviation for: **present position symbol**

Fr: PPS

practice instrument approach

Other expression for: **simulated approach**

precipitation

Any product of the condensation of atmospheric water vapour that is deposited on the earth's surface.

Fr: précipitations

precise final approach fix

U.S.: The geographical position on the final approach course where the designed vertical path or glide path intercepts the intermediate segment altitude and where the final approach segment commences.

Note: This point is depicted by the lightning bolt symbol on U.S. Government charts.

- abbreviation: PFAF
- see also: **final approach fix (FAF)**

precision approach CAT I

Operation down to minima of 200 ft decision height (DH) and runway visual range (RVR) 2600 ft. (When RVR is not available, 0.5 SM ground visibility is substituted.)

Note: Rotorcraft visibility limits may be half those published for aeroplanes.

- see also: **precision approach procedure**

Fr: approche de précision CAT I

precision approach CAT II

Operation down to minima below 200 ft decision height (DH) and runway visual range (RVR) 2600 ft, to as low as 100 ft DH and RVR 1200 ft.

Note: Rotorcraft visibility limits may be lower than those published for aeroplanes.

- see also: **precision approach procedure**

Fr: approche de précision CAT II

precision approach CAT III

Operation down to minima prescribed in the carrier's operating specifications in the operator's operations manual or in the *Canada Air Pilot (CAP)*.

- see also: **precision approach procedure**

Fr: approche de précision CAT III

precision approach path indicator

A visual glide slope indicator (VGSI) consisting of four light units normally situated on the left side of the runway (on both sides of the runway, in the case of the military) in the form of a wing bar and indicating that the aircraft is on slope if the two units nearest the runway show red and the two units furthest from the runway show white, too high if all units show white, and too low if all units show red.

- abbreviation: PAPI
- see also: **abbreviated precision approach path indicator (APAPI)** and **visual glide slope indicator (VGSI)**

Fr: indicateur de trajectoire d'approche de précision

precision approach procedure

An instrument approach procedure (IAP) using azimuth and glide path (GP) information provided by an instrument landing system (ILS), a microwave landing system (MLS) or a precision approach radar (PAR).

There are three types of precision approaches:

- (a) **precision approach CAT I;**
- (b) **precision approach CAT II;** and
- (c) **precision approach CAT III.**

Fr: procédure d'approche de précision

precision approach radar

A high-definition, short-range radar used as an approach aid. This system provides the controller with altitude, azimuth and range information of high accuracy for the purpose of assisting the pilot in executing an approach and landing. This form of navigation assistance is termed a "precision radar approach."

- abbreviation: PAR

Fr: radar d'approche de précision

precision controller

A duty controller assigned to a precision radar approach control position.

Fr: contrôleur de précision

precision radar approach

An instrument approach procedure (IAP) in which the final approach is conducted in accordance with directions issued by a controller referring to a precision approach radar (PAR) display.

- see also: **ground controlled approach (GCA)**

Fr: approche au radar de précision

precision runway

A runway served by visual aids and non-visual NAVAIDs that provide lateral and vertical guidance to the operating minima as specified in precision runway CAT I, precision runway CAT II and precision runway CAT III.

- see also: **precision runway CAT I, precision runway CAT II, and precision runway CAT III**

Fr: piste de précision

precision runway CAT I

A runway adequate for instrument approach down to a decision height (DH) lower than 250 ft, but not lower than 200 ft, above height above aerodrome (HAA) or height above touchdown (HAT) and in operating visibility not less than 0.5 SM or runway visual range (RVR) 2600 ft.

- see also: **precision runway**

Fr: piste de précision CAT I

precision runway CAT II

A runway adequate for instrument approach down to a decision height (DH) lower than 200 ft, but not lower than 100 ft, above height above aerodrome (HAA) or height above touchdown (HAT) and in operating visibility not less than runway visual range (RVR) 1200 ft.

- see also: **precision runway**

Fr: piste de précision CAT II

precision runway CAT III

There are three types of precision runway CAT III:

- (a) CAT III A: Operations are conducted or intended to be conducted down to a runway visual range (RVR) not less than 600 ft (no decision height (DH) being applicable).
- (b) CAT III B: Operations are conducted or intended to be conducted down to an RVR not less than 300 ft (no DH being applicable).
- (c) CAT III C: Operations are conducted or intended to be conducted with no DH and no RVR limitations.

- see also: **precision runway**

Fr: piste de précision CAT III

pre-departure clearance

(1) Canada: An initial IFR clearance delivered electronically via air-ground data link (AGDL) to airline companies with an on-site computer capable of interfacing with ATC and the data link service provider.

- abbreviation: PDC

Note: Following initial delivery of the clearance to the air operator, the latter may subsequently relay the clearance by non-electronic means to the flight crew if the aircraft is not suitably equipped.

- see also: **departure clearance** and **data link departure clearance (DCL)**

Fr: autorisation prédépart

(2) U.S.: An application with the Terminal Data Link System (TDLS) that provides clearance information to subscribers, through a service provider, in text to the cockpit or gate printer.

predictive wind shear alert system

U.S.: Expression for: **predictive wind shear system (PWS)**

- abbreviation: PWS

predictive wind shear system

A system that detects wind shear (WS) ahead of an aircraft and provides a timely aural and visual warning allowing the pilot to avoid or minimize the effects of WS.

- abbreviation: PWS

- see also: **reactive wind shear system (RWS)**

Note: PWS provides approximately a one-minute advance warning of a wind-shear area.

Fr: système prédictif de cisaillement du vent

preferential arrival route

A specific arrival route from an appropriate en-route point to an airport or terminal area. It may be included in a standard terminal arrival (STAR) or a preferred IFR route.

Fr: route d'arrivée préférentielle

preferential departure route

A specific departure route from an airport or terminal area to an en-route point where there is no further need for flow control. It may be included in a standard instrument departure (SID) or a preferred IFR route.

Fr: route de départ préférentielle

preferential runway

One or more runways designated and published by the airport operator whose selection directs aircraft away from noise-sensitive areas during the initial departure and final approach phases of flight.

Designation of preferential runways may be governed by time restrictions, weather, runway conditions, airport layout, aircraft routings or capacity maximization.

- see also: **preferred runway**

Fr: piste préférentielle

preferred IFR route

A route established between busier airports to increase system efficiency and capacity. IFR clearances are issued on the basis of such routes except when severe weather avoidance procedures or other factors dictate otherwise. Preferred IFR routes are correlated with standard instrument departures (SID) and standard terminal arrivals (STAR) and may be defined by airways, high level airways, or direct routes between NAVAIDs or waypoints, radials or distance measuring equipment (DME) fixes, or any combination thereof.

Fr: route IFR préférentielle

preferred runway

At an uncontrolled aerodrome, the most suitable operational runway, taking into consideration wind direction and speed, noise abatement restrictions, runway conditions, ground traffic, and any other relevant factor or restriction.

- see also: **preferential runway**

Fr: piste préférée

pre-flight pilot briefing

Other expression for: **pilot briefing**

present position symbol

The display of a target after processing by a radar data processing system.

- abbreviation: PPS

- see also: **target**

Fr: symbole de position actuelle

prevailing visibility

The maximum visibility value common to sectors comprising one half or more of the horizon circle.

Fr: visibilité dominante

primary frequency

The radiotelephony frequency assigned to an aircraft as a first choice for air-ground communication in a radiotelephony network.

Fr: fréquence principale

primary means of communication

The means of communication that must normally be adopted by aircraft and ground stations as a first choice where alternative means of communication exist.

Fr: moyen principal de communication

primary radar

Other expression for: **primary surveillance radar** (PSR)

primary surveillance radar

A radar system that detects objects by means of reflected radio signals.

- abbreviation: PSR

- also called: primary radar

- see also: **radar**

Fr: radar primaire de surveillance

prior permission required

An expression used to indicate that permission from the appropriate authority must be obtained before certain aeronautical activities can be carried out.

- abbreviation: PPR

Fr: autorisation préalable requise

private advisory station

A private facility established at a controlled or uncontrolled aerodrome for use in connection with company business such as the servicing of aircraft, availability of fuel, lodging, etc.

- abbreviation: PAS

Note: The use of private advisory services at controlled or uncontrolled aerodromes with ATC, FSS or RAAS shall not include information relating to ATS, weather reports, the condition of landing strips, or any other communication normally provided by ATS units.

Fr: station de service consultatif privé

procedure altitude

A published altitude used in defining the vertical profile of a flight procedure, at or above the minimum obstacle clearance altitude where established.

Fr: altitude de procédure

procedure altitude/height

ICAO: Expression for: **procedure altitude**

procedure turn

A manoeuvre in which a turn is made away from a designated track and followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track.

- abbreviation: PT

Fr: virage conventionnel

procedure turn inbound

The point of a procedure turn manoeuvre where course reversal has been completed and an aircraft is established inbound on the intermediate approach or final approach course. A report of “procedure turn inbound” is normally used by ATC as a position report for separation purposes.

Fr: virage conventionnel en rapprochement

progress report

Other expression for: **position report**

progressive taxi

Precise taxi instructions given to a pilot unfamiliar with the aerodrome or issued in stages as the aircraft proceeds along the taxi route.

Fr: circulation au sol progressive

prohibited area

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

Fr: zone interdite

PSR

Abbreviation for: **primary surveillance radar**

Fr: PSR

PT

Abbreviation for: **procedure turn**

Fr: PT

PTN

ICAO: Abbreviation for: **procedure turn**

Fr: PTN

“Pull up and go around”

An instruction given to the pilot by ATC when, in the controller’s judgment, the aircraft landing procedure cannot safely be continued to touchdown.

Fr: « Remontez et faites un circuit »

push-back

An expression used to indicate the rearward movement of an aircraft under tow.

- see also: **taxi** and **power-back**

Fr: refoulement

PWS

(1) Abbreviation for: **predictive wind shear system**

Fr: PWS

(2) U.S.: Abbreviation for: **predictive wind shear alert system**

4.18 – Q –

QUAD

Abbreviation for: **quadrant**

Fr: QUAD

quadrant

Part of a circle, centred on a NAVAID or a specified point.

- abbreviation: QUAD

Fr: quadrant

quick-donning mask

An oxygen mask that can be secured on the face of the wearer with one hand within 5 s and that provides an immediate supply of oxygen.

Fr: masque à mise rapide

4.19 – R –**R**

Abbreviation for: **radial**

Fr: R

RA

(1) Abbreviation for: **radio altimeter**

Fr: RA

(2) Abbreviation for: **resolution advisory**

Fr: RA

RAAS

Abbreviation for: **remote aerodrome advisory service**

Fr: RAAS

RADALT

Abbreviation for: **radio altimeter**

radar

A radio detection device that provides information on range, azimuth or elevation of objects. There are two types of radar: primary surveillance radar (PSR) and secondary surveillance radar (SSR).

- see also: **primary surveillance radar** (PSR) and **secondary surveillance radar** (SSR)

Fr: radar

radar advisory

The provision of advice and information based on radar observations.

Fr: avis radar

radar approach

An approach executed by an aircraft under the direction of a radar controller.

Fr: approche au radar

“Radar contact”

U.S.: Expression for: **“Radar identified”**

radar-controlled airspace

A controlled airspace within which radar control service is provided.

Fr: espace aérien contrôlé au radar

radar control service

The control of aircraft through the provision of radar vectors in order to establish required separation and/or desired spacing between aircraft, and between aircraft and obstacles.

Fr: service de contrôle radar

radar echo

(1) The electromagnetic energy received after reflection from an object.

- also called: radar return

Fr: écho radar

(2) The deflection or change of intensity produced by a radar echo on a cathode ray tube display.

- also called: radar return

Fr: écho radar

radar environment

An area in which radar service may be provided.

Fr: environnement radar

radar flight following

The observation of the progress of radar-identified aircraft, the primary navigation of which is being provided by the pilot, wherein the controller retains and correlates the aircraft identity with the appropriate target or target symbol displayed on the radar scope.

Fr: suivi des vols au radar

radar handoff

The process of transferring radar identification of an aircraft from one controller to another without interrupting radar service.

Fr: transfert radar

radar identification

The process of ascertaining that a particular target is the radar echo from a specific aircraft.

Fr: identification radar

“Radar identified”

An expression used by ATC to inform the pilot of an aircraft when radar identification is established.

Fr: « Identifié radar »

radar-identified aircraft

An aircraft for which the radar blip or radar position symbol is seen and identified on a radar display.

Fr: aéronef identifié radar

radar monitoring

The use of radar for the purpose of providing aircraft with information and advice relating to significant deviations from the nominal flight path.

Fr: surveillance radar

radar navigational assistance

The provision of position information, vectors, or track and ground speed checks.

Fr: assistance de navigation radar

RADAR REQUIRED

Annotation used on an instrument approach chart to indicate that the procedure turn may have been eliminated and that the initial approach portion of the procedure is being provided by ATC vectors. Without ATC vectoring, the instrument approach procedure (IAP) may not have a published initial approach.

Fr: RADAR REQUIS

radar return

Other expression for: **radar echo**

radar route

A flight path or route over which an aircraft is vectored. Navigational guidance and altitude assignments are provided by ATC.

Fr: route radar

radar separation

The spacing of aircraft in accordance with established minima, based on information derived from radar sources.

Fr: espacement radar

radar service

A service, provided directly by means of radar, that includes radar advisory, radar control service, radar monitoring, radar navigational assistance and radar separation.

Fr: service radar

“Radar service terminated”

An expression used by ATC to inform a pilot that he or she will no longer be provided with any of the services that could be received while in radar contact.

Fr: « Service radar terminé »

radar vectoring

Other expression for: **vector**

radial

A magnetic bearing from a VHF omnidirectional range (VOR), tactical air navigation system (TACAN), or VORTAC facility, except for facilities in the Northern Domestic Airspace (NDA), which may be oriented on true or grid north.

- abbreviation: R

Fr: radiale

radio

A general expression applied to the use of radio waves.

Fr: radio

radio altimeter

Radionavigation equipment on board an aircraft that makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the surface of the earth.

- abbreviations: RA or RADALT

Fr: radioaltimètre

radio beacon

A station transmitting non-directional radio signals.

- see also: **non-directional beacon** (NDB)

Fr: radiophare

radio direction-finding station

A radio station intended to determine only the direction of other stations by means of transmissions from the latter.

- also called: DF station, direction-finding station

Fr: station radiogoniométrique

radio magnetic indicator

An aircraft navigational instrument that, coupled with a gyro compass or any other compass system, indicates the direction of a selected NAVAID and indicates bearing with respect to the heading of the aircraft.

- abbreviation: RMI

Fr: indicateur radiomagnétique

RAIM

Abbreviation for: **receiver autonomous integrity monitoring**

Fr: RAIM

ramp

Other expression for: **apron**

rapid exit taxiway

Other expression for: **high speed taxiway**

rapid-exit taxiway indicator lights

A set of fixed unidirectional yellow lights installed in the runway adjacent to the centreline to give an indication to pilots of the location of the next available rapid-exit taxiway.

- abbreviation: RETIL

•see also: **high speed taxiway**

Note: The lights are positioned in a 3-2-1 sequence at 100 m intervals prior to the point of tangency of the rapid-exit taxiway centreline.

Fr: feux indicateurs de voie de sortie rapide

RAR

Abbreviation for: **runway acceptance rate**

Fr: RAR

rated coverage

The area surrounding a non-directional beacon (NDB) within which the strength of the vertical field of the ground wave exceeds the minimum value specified for the geographical area in which the NDB is situated.

Fr: couverture nominale

rate one-half turn

The turn rate of 1.5° per second normally used by aircraft operating at approximately 250 kt or more.

Fr: virage de taux un demi

rate one turn

The turn rate of 3° per second normally used by aircraft operating at less than 250 kt.

Fr: virage de taux un

RCAG

U.S.: Abbreviation for: **remote communications air/ground facility**

• see: **peripheral station (PAL)**

RCD

Abbreviation for: **departure clearance request**

Fr: RCD

RCL

Abbreviation for: **request for clearance**

Fr: RCL

RCLL

(1) Abbreviation for: **runway centreline lights**

Fr: RCLL

(2) U.S.: Abbreviation for: **runway centerline lights**

(3) ICAO: Abbreviation for: **runway centre line lights**

Fr: RCLL

RCO

Abbreviation for: **remote communications outlet**

Fr: RCO

reactive wind shear system

A system that detects wind shear (WS) when an aircraft encounters it and that provides the pilot with guidance to conduct a WS escape manoeuvre.

•abbreviation: RWS

•see also: **predictive wind shear system (PWS)**

Fr: système de réaction au cisaillement du vent

readback

A procedure whereby the receiving station repeats a received message or an appropriate part thereof to the transmitting station so as to obtain confirmation that the message was received correctly.

Fr: relecture

“Read back”

An expression used in radiocommunication meaning “Repeat all, or the specified part, of this message back to me exactly as received.”

Fr: « Relisez »

receiver autonomous integrity monitoring

A technique, part of the ABAS, whereby an airborne global navigation satellite system (GNSS) receiver/processor autonomously monitors the integrity of the navigation signals from GNSS satellites.

- abbreviation: RAIM
- see also: **aircraft-based augmentation system (ABAS)**

Fr: contrôle autonome de l'intégrité par le récepteur

receiver only

The capability to receive radio communications only, owing to the absence or failure of the transmitter.

- abbreviation: RONLY

Fr: récepteur seulement

reciprocal tracks

An expression used by ATS in the application of separation to indicate tracks that converge or diverge at an angle of 136° to 180° inclusive.

Fr: routes inverses

“Recleared”

ICAO: An expression used in radiocommunication meaning “A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof.”

Fr: « Réautorisé »

REDL

Abbreviation for: **runway edge lights**

Fr: REDL

reduced vertical separation minimum

The application of 1000-ft vertical separation at and above FL 290 between aircraft approved to operate in reduced vertical separation minimum airspace.

- abbreviation: RVSM

Fr: minimum réduit d'espacement vertical

reduced-visibility operations

Operations below RVR 2 600 (½ SM) down to and including RVR 1 200 (¼ SM).

- abbreviation: RVO
- see also: **low-visibility operations (LVO)** and **reduced-visibility operations plan (RVOP)**

Fr: opérations par visibilité réduite

reduced-visibility operations plan

A plan that calls for specific procedures established by the aerodrome operator and/or ATC when aerodrome visibility is below RVR 2 600 (½ SM) down to and including RVR 1 200 (¼ SM).

- abbreviation: RVOP
- see also: **low-visibility operations plan (LVOP)** and **reduced-visibility operations (RVO)**

Fr: plan d'exploitation par visibilité réduite

REIL

U.S.: Abbreviation for: **runway end identifier lights**

rejected landing

Other expression for: **aborted landing**

rejected takeoff

Other expression for: **aborted takeoff**

release time

U.S.: Expression for: “**Clearance valid . . .**”

remote aerodrome advisory service

The provision, by FSSs via remote communications outlets (RCO), of information pertinent to the arrival and departure phases of flight and for transit through a mandatory frequency (MF) area.

- abbreviation: RAAS

Fr: service consultatif télécommandé d'aérodrome

remote communications air/ground facility

U.S.: Expression for: **peripheral station** (PAL)

- abbreviation: RCAG

remote communications outlet

A facility remotely established from an FSS or FIC for the provision of communications between aircraft and this FSS or FIC.

- abbreviation: RCO

Fr: installation radio télécommandée

remotely piloted aircraft

A navigable aircraft, other than a balloon, rocket or kite, that is operated by a pilot who is not on board.

- abbreviation: RPA

- see also: **beyond visual line of sight (BVLOS)**, **command and control link**, **control station**, **flyaway**, **lost link**, **lost-link procedure**, **model aircraft**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft (UA)**, **unmanned aircraft system (UAS)**, **unmanned air vehicle (UAV)**, and **visual line of sight (VLOS)**

Fr: aéronef télépiloté

remotely piloted aircraft system

A set of configurable elements consisting of a remotely piloted aircraft, its control station, the command and control links and any other system elements required during flight operation.

- abbreviation: RPAS

- see also: **beyond visual line of sight (BVLOS)**, **model aircraft**, **remotely piloted aircraft (RPA)**, **RPAS incursion**, **unmanned aircraft (UA)**, **unmanned aircraft system (UAS)**, **unmanned air vehicle (UAV)**, and **visual line of sight (VLOS)**

Fr: système d'aéronef télépiloté

remote pilot station

ICAO: Expression for: **control station**

- abbreviation: RPS

rendezvous

A prearranged meeting at a given time and location from which to begin an action or phase of an operation or to which to return after an operation.

Fr: point de rassemblement

RENL

Abbreviation for: **runway end lights**

Fr: RENL

reporting point

A specific fix in relation to which the position of an aircraft can be reported.

Fr: point de compte rendu

request for clearance

A request sent by data link by the flight crew for authorization to proceed within oceanic airspace.

- abbreviation: RCL
- see also: **clearance acknowledgement (CLA)** and **oceanic clearance delivery (OCD)**

Fr: demande d'autorisation

required navigation performance

A statement of the navigation performance accuracy necessary for operation within a defined airspace.

- abbreviation: RNP

Fr: qualité de navigation requise

required navigation performance capability airspace

As geographically delineated in the *Designated Airspace Handbook (DAH)*, controlled airspace within the Canadian Domestic Airspace (CDA) designated for area navigation (RNAV) operations. Only aircraft certified as meeting the required navigation performance capability (RNPC) are permitted to operate on published, high level fixed RNAV routes or receive improved ATC separation minimums based on RNPC. Certification is dependent upon crew training and navigation equipment that permits position determination within ± 4 NM.

Note: Aircraft certified for Canadian minimum navigation performance specifications (CMNPS) and North Atlantic minimum navigation performance specifications (NAT MNPS) operations are deemed to be RNPC certified.

- also called: RNPC airspace

Fr: espace aérien de performances minimales de navigation requises

required navigation performance type

A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 percent of the total flying time. For example, RNP 4 represents a navigation accuracy of ± 4 NM on a 95 percent containment basis.

Fr: type de qualité de navigation requise

required visual reference

In respect of an aircraft on an approach to a runway, the section of the approach area of the runway or the visual aids that, when viewed by the pilot of the aircraft, enable the pilot to make an assessment of the aircraft position and the rate of change of position relative to the nominal flight path in order to continue the approach and complete the landing.

Fr: référence visuelle requise

RESA

Abbreviation for: **runway end safety area**

Fr: RESA

resolution advisory

An advisory issued by airborne collision avoidance system (ACAS)/traffic alert and collision avoidance system (TCAS) to alert pilots to potential conflicting air traffic and provide them with a suggested flight-path change in the vertical plane to reduce the possibility of collision.

- abbreviation: RA

Fr: avis de résolution

responsible person

(1) NAV CANADA: An individual who has agreed with the person who has filed a flight itinerary (FI) to ensure that the following are notified in the manner prescribed in *Canadian Aviation Regulation (CAR)* 602 if the aircraft is overdue:

- (a) an ATC unit, an FSS, an FIC or a community aerodrome radio station (CARS); or
- (b) a joint rescue coordination centre (JRCC).

Fr: personne de confiance

- (2) **CAR**: An individual who has agreed with the person who has filed a flight itinerary (FI) to ensure that the following are notified in the manner prescribed in CAR 602 if the aircraft is overdue:
- (a) an ATC unit, an FSS or a community aerodrome radio station (CARS); or
 - (b) a rescue coordination centre (RCC).

Fr: personne de confiance

responsible unit

The unit assigned an area of responsibility (AOR) in the VFR flight plan (FP) processing and alerting service.

Fr: unité responsable

restricted airspace

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

- also called: restricted area

Fr: espace aérien réglementé

restricted area

Other expression for: **restricted airspace**

restricted instrument procedure

An instrument approach, departure or transition procedure that is not authorized for public use, but that has been approved by Transport Canada for restricted use by one or more operators and by the military provided that operational requirements are met.

- abbreviation: RIP

Fr: procédure aux instruments restreinte

“Resume normal navigation”

An expression used by ATC to advise a pilot to resume his or her own navigational responsibility. It is issued after completion of a vector or when radar contact is lost while the aircraft is being vectored.

Fr: « Reprenez navigation normale »

“Resume normal speed”

An expression used by ATC to advise a pilot that previously issued speed restrictions are cancelled, but that published speed restrictions are still applicable, unless otherwise stated by ATC.

Fr: « Reprenez vitesse normale »

“Resume own navigation”

U.S.: Expression for: **“Resume normal navigation”**

RETIL

Abbreviation for: **rapid-exit taxiway indicator lights**

Fr: RETIL

RGL

Abbreviation for: **runway guard lights**

Fr: RGL

RILS

Abbreviation for: **runway identification lights**

Fr: RILS

RIP

Abbreviation for: **restricted instrument procedure**

Fr: RIP

RLLS

U.S. and ICAO: Abbreviation for: **runway lead-in lighting system**

Fr: RLLS

RMI

Abbreviation for: **radio magnetic indicator**

Fr: RMI

RNAV

Abbreviation for: **area navigation**

Fr: RNAV

RNAV approach

An instrument approach procedure (IAP) that relies on aircraft area navigation equipment for navigational guidance.

Fr: approche RNAV

RNAV SID

An IFR ATC departure procedure coded in an aircraft FMS database and published in graphic and textual form for use by aircraft that are appropriately equipped and authorized.

- see also: **RNAV STAR**

Fr: SID RNAV

RNAV specification

A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

- see also: **navigation specification** and **RNP specification**

Fr: spécification RNAV

RNAV STAR

An IFR ATC arrival procedure coded in an aircraft FMS database and published in graphic and textual form for use by aircraft that are appropriately equipped and authorized.

- see also: **RNAV SID**

Fr: STAR RNAV

RNP

Abbreviation for: **required navigation performance**

Fr: RNP

RNP APCH

An RNP navigation specification for various types of RNP approaches.

Note: RNP APCH includes (but is not limited to) LNAV, LNAV/VNAV and LPV approaches.

- see also: **RNP approach**

Fr: RNP APCH

RNP approach

An approach that requires GNSS for on-board performance monitoring.

- see also: **RNP APCH**

Fr: approche RNP

RNPC airspace

Other expression for: **required navigation performance capability airspace**

RNP specification

A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH.

- see also: **navigation specification** and **RNAV specification**

Fr: spécification RNP

road-holding position marking

A marking provided at all road entrances to a runway at the holding position and in accordance with the local traffic regulations.

Fr: marque de point d'attente sur voie de service

rocket

A projectile that contains its own propellant and that depends for its flight upon the reaction resulting from the release of a continuous jet of rapidly expanding gases.

Fr: fusée

“Roger”

An expression used in radiocommunication meaning “I have received all of your last transmission.”

Fr: « Roger »

rolling takeoff

Other expression for: **immediate takeoff**

rollout RVR

The RVR readout values obtained from RVR equipment located nearest the rollout end of the runway.

Fr: RVR lors de la décélération

RONLY

Abbreviation for: **receiver only**

Fr: RONLY

rotation point

The location along a runway where an aircraft is brought to the flying attitude as takeoff speed is reached.

Fr: point de cabrage

rotorcraft

A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.

Fr: giravion

route description

The unambiguous delineation of a route in terms of an ordered sequence of ATS route designators or significant points.

Fr: description de route

route segment

A part of a route, each end of which is identified by

- (a) a continental or insular geographical location; or
- (b) a point at which a definite radio fix can be established.

Fr: segment de route

RPA

Abbreviation for: **remotely piloted aircraft**

Fr: ATP

RPAS

Abbreviation for: **remotely piloted aircraft system**

- see also: **unmanned air vehicle (UAV)**

Fr: RPAS

RPAS incursion

Canada: An unauthorized RPAS flight in controlled airspace that might pose a threat to the safety of aviation or to people on the ground.

- see also: **remotely piloted aircraft system (RPAS)**

Fr: incursion de SATP

RPS

ICAO: Abbreviation for: **remote pilot station**

- see: **control station**

Fr: RPS

RSC/CRFI NOTAM

A NOTAM disseminated to alert pilots to natural winter surface contaminants such as snow, slush, and ice conditions that could affect aircraft braking and other operational performance. Such NOTAMs are considered special series NOTAMs that, because of their short life and significant volume during the winter season, require non-standard handling.

Note 1: This term is derived from the words “Runway Surface Condition/Canadian Runway Friction Index NOTAM.”

Note 2: This NOTAM may also be issued by a military ATC unit as an RSC/JBI NOTAM.

- also called: NOTAMJ, RSC/JBI NOTAM, Runway Surface Condition NOTAM

Fr: NOTAM RSC/CRFI

RSC/JBI NOTAM

DND: Expression for: **RSC/CRFI NOTAM**

RSC report

Other expression for: **runway surface condition report**

RTIL

Abbreviation for: **runway threshold identification lights**

Fr: RTIL

runway

A defined rectangular area located on a land aerodrome and prepared for the landing and takeoff runs of aircraft along its length.

- abbreviation: RWY

Fr: piste

runway acceptance rate

The number of aircraft that can land on and depart from a runway consistent with the runway and aerodrome conditions during a specified period of time.

- abbreviation: RAR

Fr: taux d'acceptation de piste

runway centerline lights

U.S.: Expression for: **runway centreline lights (RCLL)**

- abbreviation: RCLL

runway centre line lights

ICAO: Expression for: **runway centreline lights (RCLL)**

- abbreviation: RCLL

runway centreline lights

Flush centreline lights spaced at intervals of 15 m beginning 22.5 m from the landing threshold and extending to within 22.5 m of the opposite end of the runway.

- abbreviation: RCLL

• see also: **runway lights**, **runway edge lights** (REDL), **runway end lights** (RENL), and **runway guard lights** (RGL)

Fr: feux d'axe de piste

runway edge lights

Aeronautical ground lights located along the edges of the runway.

- abbreviation: REDL

• see also: **runway lights**, **runway centreline lights** (RCLL), **runway end lights** (RENL), and **runway guard lights** (RGL)

Fr: feux de bord de piste

runway end identifier lights

U.S.: Expression for: **runway threshold identification lights** (RTIL)

- abbreviation: REIL

runway end lights

Fixed unidirectional lights located near the runway extremity and showing red in the direction of the runway.

- abbreviation: RENL

• see also: **runway lights**, **runway edge lights** (REDL), and **runway guard lights** (RGL)

Fr: feux d'extrémité de piste

runway end safety area

An area that extends from the end of the runway strip, primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

- abbreviation: **RESA**

Fr: aire de sécurité d'extrémité de piste

runway excursion

Any occurrence in which an aircraft fails to confine its takeoff, landing or ground manoeuvring to the intended runway.

Note: There are two types of runway excursions: overrun and veer-off.

- see also: **overrun** and **veer-off**

Fr: sortie de piste

runway gradient

The average slope, measured in percent, between two ends or points on a runway.

Fr: pente de la piste

runway guard lights

Lights intended to caution pilots or vehicle drivers that they are about to enter an active runway.

- abbreviation: RGL

• see also: **runway lights**, **runway edge lights** (REDL), and **runway end lights** (RENL)

Fr: feux de protection de piste

runway heading

The magnetic or true direction that corresponds with the runway centreline rather than the painted runway numbers.

Fr: cap de piste

runway-holding position

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

- also called: "holding point" (in radiocommunications)

Fr: point d'attente avant piste

runway-holding position marking

A marking displayed at runway holding positions leading to taxiway/runway or runway/runway intersections where one runway forms part of a standard taxi-route.

Fr: marque de point d'attente avant piste

runway identification lights

Canada: Former term for: **runway threshold identification lights** (RTIL)

- abbreviation: RILS

Fr: feux d'identification de piste

runway incursion

Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Fr: incursion sur piste

runway in use

Any runway currently being used for takeoff or landing. When multiple runways are used, they are all considered runways in use.

- also called: active runway

Fr: piste en service

runway lead-in lighting system

One or more series of flashing lights installed at or near ground level that provides positive visual guidance along an approach path, either curved, straight, or a combination thereof, where hazardous terrain, obstacles, or noise abatement procedures cause special problems.

- Canada: abbreviation: LDIN
- U.S. and ICAO: abbreviation: RLLS
- also called: runway lead-in light system

Note: The abbreviation "LDIN" has been replaced by "RLLS" in the U.S.

Note: Under ICAO, the system may be augmented by steady burning lights where such lights would assist in identifying the system.

Fr: dispositif lumineux de guidage vers la piste

runway lead-in light system

Other expression for: **runway lead-in lighting system**

runway lights

Aeronautical ground lights located on a runway, indicating its direction or boundaries, and including but not limited to runway centreline lights, runway edge lights, runway end lights, threshold lights and touchdown zone lights.

- see also: **runway edge lights** (REDL), **runway centreline lights** (RCLL), **runway end lights** (RENL), and **runway guard lights** (RGL)

Fr: feux de piste

runway side stripe marking

A marking in the form of a continuous stripe placed along each edge of the runway to provide contrast between the runway edges and the shoulders or the surrounding terrain.

Note: Runway side stripes on all Canadian runways are interrupted at the intersection of runways and taxiways.

Fr: marque latérale de piste

Runway Surface Condition NOTAM

Other expression for: **RSC/CRFI NOTAM** or **RSC/JBI NOTAM**

runway surface condition report

Section of the Aircraft Movement Surface Condition Report (AMSCR) which provides runway surface information using a verbal description of the runway condition.

- also called: RSC report
- see also: **Aircraft Movement Surface Condition Report (AMSCR)**

Fr: compte rendu de l'état de la surface de la piste

runway threshold identification lights

Flashing white lights installed at the threshold of a runway when additional threshold conspicuity is necessary or where it is not practicable to provide other approach lighting aids.

- abbreviation: RTIL
- see also: **runway identification lights (RILS)**

Fr: feux d'identification de seuil de piste

runway visibility value

U.S.: Expression for: **runway visual range (RVR)**

- abbreviation: RVV

runway visual range

In respect of a runway, the maximum horizontal distance (in feet) for the direction of takeoff or landing, as measured by an automated visual landing distance system and reported by an ATC unit or an FSS, at which the runway, or the lights or markers delineating it, can be seen from a point above its centreline at a height corresponding to the average eye level of pilots at touchdown.

- abbreviation: RVR

Fr: portée visuelle de piste

RVO

Abbreviation for: **reduced-visibility operations**

Fr: RVO

RVOP

Abbreviation for: **reduced-visibility operations plan**

Fr: RVOP

RVR

Abbreviation for: **runway visual range**

Fr: RVR

RVSM

Abbreviation for: **reduced vertical separation minimum**

Fr: RVSM

RVSM aircraft

An aircraft that meets reduced vertical separation minimum (RVSM) requirements for certification and for operator approval.

- see also: **non-RVSM aircraft**

Fr: aéronef RVSM

RVV

U.S.: Abbreviation for: **runway visibility value**

- see: **runway visual range (RVR)**

RWS

Abbreviation for: **reactive wind shear system**

Fr: RWS

RWY

Abbreviation for: **runway**

Fr: RWY

4.20 – S –

safe altitude 100 NM

The lowest altitude that may be used under instrument meteorological conditions (IMC) that will provide a minimum clearance of 1000 ft or, in a designated mountainous region, 1500 or 2000 ft, as appropriate, rounded up to the next 100-ft increment, under conditions of standard temperature and pressure, above all obstacles located in an area contained within a radius of 100 NM of the aerodrome geometric centre.

Fr: altitude de sécurité 100 NM

sail-back

A manoeuvre during high wind conditions (usually with power off) where floatplane movement is controlled by water rudders and by the opening and closing of cabin doors.

Fr: dérive dirigée

same track

In the application of separation, expression used by ATC to indicate identical tracks or tracks that converge or diverge at an angle of 1° to 44° inclusive.

Fr: même route

SAR

Abbreviation for: **search and rescue**

Fr: SAR

satellite-based augmentation system

ICAO: Expression for: **wide area augmentation system (WAAS)**

- abbreviation: SBAS

satellite voice communications

A component of the satellite communications system that provides a two-way channel for over-the-horizon voice communications between flight deck crew and designated contacts on the ground, including air traffic controllers, radio operators, and airline operations personnel.

- abbreviation: SATVOICE

Note: Radiotelephony conventions apply.

Note: Detailed guidance is published in *AIP Canada (ICAO) GEN* and on en-route low altitude and en-route high altitude charts.

Fr: communications vocales par satellite

SATVOICE

Abbreviation for: **satellite voice communications**

Fr: SATVOICE

“Say again”

An expression used to request a repetition of the last transmission.

- see also: **“I say again”**

Fr: « Répétez »

“Say altitude”

An expression used by ATC to ascertain an aircraft’s specific altitude or flight level (FL).

Fr: « Dites altitude »

SBAS

ICAO: Abbreviation for: satellite-based augmentation system

- see: **wide area augmentation system (WAAS)**

Fr: SBAS

SCA

Abbreviation for: **Southern Control Area**
Fr: SCA

SCAT I

Abbreviation for: **special Category I**
Fr: SCAT I

SCIA

Abbreviation for: **simultaneous converging instrument approaches**
Fr: SCIA

SDA

Abbreviation for: **Southern Domestic Airspace**
Fr: SDA

sea clutter

Radar echoes caused by waves of the sea.
Fr: échos de vagues

search and rescue

The use of aircraft, surface craft, submarines, and specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea.
• abbreviation: SAR
Fr: recherches et sauvetage

secondary radar

Other expression for: **secondary surveillance radar (SSR)**

secondary surveillance radar

A radar system that requires complementary aircraft equipment (transponder). The transponder generates a coded reply signal in response to transmissions from the ground station (interrogator). Since this system relies on transponder-generated signals rather than signals reflected from the aircraft, as in primary surveillance radar, it offers significant operational advantages such as increased range and positive identification.
• abbreviation: SSR
• also called: secondary radar
• see also: **radar**
Fr: radar secondaire de surveillance

sectional chart

U.S.: Expression for: **VFR navigation chart (VNC)**

sector

A part of an ATC unit that has a designated area of responsibility (AOR) in which ATS are provided.
Fr: secteur

see and avoid

An expression relating to a concept whereby pilots of aircraft flying in visual meteorological conditions (VMC), regardless of the type of flight plan (FP), are responsible for observing the presence of other aircraft, terrain and obstacles and of manoeuvring their aircraft as required to avoid these objects.
Fr: voir et éviter

SELCAL

Abbreviation for: **selective calling system**
Fr: SELCAL

selective calling system

A system that provides an automatic and selective method of calling any aircraft. Voice calling is replaced by the transmission of code tones to the aircraft over the international radiotelephony channels. This system is installed on all international frequencies at Canadian stations.

- abbreviation: SELCAL

Fr: système d'appel sélectif

separation

The spacing between aircraft, altitudes, or tracks.

Fr: espacement

separation minimum

The least allowable amount of lateral, longitudinal, or vertical separation to be applied.

Fr: minimum d'espacement

severe icing

An atmospheric condition in which the rate of ice accumulation is such that de-icing or anti-icing equipment cannot reduce or control the hazard.

- see also: **trace icing**, **light icing**, and **moderate icing**

Fr: givrage fort

severe weather forecast alert

U.S.: Preliminary messages issued in order to alert users that a severe weather watch bulletin (WW) is being issued. These messages define areas of possible severe thunderstorms or tornado activity.

- abbreviation: AWW

SFO

Abbreviation for: **simulated flameout**

Fr: SFO

SHF

Abbreviation for: **super high frequency**

Fr: SHF

shock wave

A region of abrupt change in pressure and density moving ahead of the aircraft as a wave front at or above the speed of sound.

Fr: onde de choc

short-range clearance

U.S.: A clearance issued to a departing IFR flight which authorizes IFR flight to a specific fix short of the destination while ATC facilities are coordinating and obtaining the complete clearance.

Note: This procedure is not used in Canada.

short takeoff and landing aircraft

An aircraft that, at some weight within its approved operating weight, is capable of operating from a STOL runway in compliance with the applicable STOL characteristics and airworthiness, operations, noise, and pollution standards.

- also called: STOL aircraft

Fr: aéronef à décollage et atterrissage courts

show line

Other expression for: **flight line** (2)

shuttle procedure

A manoeuvre involving a descent or a climb in a pattern resembling a holding pattern.

Fr: procédure de navette

SID

Abbreviation for: **standard instrument departure**

Fr: SID

sidestep maneuver [sic]

U.S.: A visual maneuver [*sic*] accomplished by a pilot at the completion of an instrument approach to permit a straight-in landing on a parallel runway not more than 1200 ft to either side of the runway to which the instrument approach was conducted.

SIGMET

Abbreviation for: **significant meteorological information**

Fr: SIGMET

SIGMET information

ICAO: Expression for: **significant meteorological information** (SIGMET)

significant meteorological information

An information message issued by a meteorological watch office (MWO) to advise pilots of the occurrence or expected occurrence of specified weather and other phenomena in the atmosphere which may have a significant impact on the safety of aircraft operations, and of the development of those phenomena in time and space.

• abbreviation: SIGMET

Note: Phenomena for which SIGMET messages are issued include the following:

- (a) active thunderstorm areas or lines of thunderstorms;
- (b) hurricanes, tropical storms;
- (c) moderate hail;
- (d) severe turbulence;
- (e) severe icing;
- (f) marked mountain waves;
- (g) widespread sandstorms and dust storms;
- (h) volcanic ash;
- (i) severe squall lines;
- (j) low-level wind shear; and
- (k) tornadoes or waterspouts.

Fr: renseignements météorologiques significatifs

significant point

(1) An expression used to describe a NAVAID, a fix derived from a NAVAID, or a geographical location as expressed in latitude and longitude.

Fr: point significatif

(2) ICAO: A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

Fr: point significatif

simulated approach

An instrument approach procedure (IAP) conducted in visual meteorological conditions (VMC) by an aircraft not on an IFR clearance.

• also called: practice instrument approach

Fr: approche simulée

simulated flameout

A practice approach to a runway by a jet aircraft (normally military) at idle thrust. The approach may start at a relatively high altitude over a runway (high key) and may continue on a relatively high and wide downwind leg with a high rate of descent and a continuous turn to final.

- abbreviation: SFO

Fr: arrêt simulé de turbomoteur

simultaneous converging instrument approaches

A procedure for conducting two or more simultaneous instrument approaches to converging runways.

- abbreviation: SCIA

Fr: approches aux instruments simultanées convergentes

simultaneous ILS/MLS approach procedures

Approach procedures permitting instrument landing system (ILS) and microwave landing system (MLS) approaches to be conducted simultaneously at airports having parallel runways.

Fr: procédures d'approche ILS/MLS simultanées

Simultaneous Intersecting Runway Operations

Canada: Former term for: **Land and Hold Short Operations (LAHSO)**

- abbreviation: SIRO

Fr: utilisation simultanée de pistes sécantes

Simultaneous Operations on Parallel or Near-Parallel Instrument Runways

A term used by ICAO to refer to operations in which aircraft conduct simultaneous approaches and/or departures from parallel or near-parallel instrument runways.

- abbreviation: SOIR
- see also: **Land and Hold Short Operations (LAHSO)**

Note: Although the term **Simultaneous Operations on Parallel or Near-Parallel Instrument Runways** is not used in the U.S. or Canada, these operations are.

Fr: opérations simultanées sur pistes aux instruments parallèles ou quasi parallèles

SIRO

Canada: Abbreviation for: **Simultaneous Intersecting Runway Operations**

- see: **Land and Hold Short Operations (LAHSO)**

Fr: SIRO

site survey

A systematic evaluation of safety risks related to a remotely piloted aircraft system (RPAS) operation and area of operation, using various analysis methods, processes, and/or techniques.

Fr: examen des lieux

SLOP

Abbreviation for: **strategic lateral offset procedure**

Fr: SLOP

“Small”

U.S.: For the purposes of wake turbulence separation minima, an expression used by ATC to classify an aircraft of 41 000 lb or less maximum certificated takeoff weight.

- see also: **“Heavy”**, **“Large”**, **light aircraft**, **medium aircraft**, **“Super”**, and **wake turbulence**

SOIR

ICAO: Abbreviation for: **Simultaneous Operations on Parallel or Near-Parallel Instrument Runways**

Fr: SOIR

sonic flight

Flight at the speed of Mach 1.

Fr: vol sonique

Southern Control Area

A controlled airspace within the Southern Domestic Airspace (SDA) at 18 000 ft ASL and above.

- abbreviation: SCA

Fr: région de contrôle du Sud

Southern Domestic Airspace

As geographically delineated in the *Designated Airspace Handbook* (DAH), all airspace within the Canadian Domestic Airspace (CDA) commencing at the Canada-United States border and extending northward to the southern limit of the Northern Domestic Airspace (NDA).

- abbreviation: SDA

Fr: espace aérien intérieur du Sud

SPADE

Abbreviation for: **special aerospace defence exercise**

Fr: SPADE

SPECI

Abbreviation for: **aerodrome special meteorological report**

Fr: SPECI

special aerospace defence exercise

The flight of one or more military aircraft on a NOPAR (do not pass to air defence radar) IFR flight plan (FP) to conduct a test of the aerospace surveillance, detection and identification capability. If identification by interception of these aircraft is also planned, it shall be contingent upon the approval of a prearranged altitude reservation prior to takeoff.

- abbreviation: SPADE

- see also: **air sovereignty test**

Fr: exercice spécial de défense aérienne

special air-report

Special observations made by aircraft operating on international air routes whenever

- (a) severe turbulence or severe icing is encountered;
- (b) moderate turbulence, hail or cumulonimbus clouds are encountered during transonic or supersonic flight; or
- (c) other meteorological conditions, for example, the other en-route weather phenomena specified for SIGMET messages, are encountered

that, in the opinion of the pilot-in-command, may affect the safety or markedly affect the efficiency of other aircraft operations.

- abbreviation: ARS

Fr: compte rendu en vol spécial

special aviation event

An air show, low-level air race, aerobatic competition, fly-in or balloon festival.

Fr: manifestation aéronautique spéciale

special Category I

The implementation of local area differential global positioning system (GPS) to provide early satellite navigation precision approach CAT I capability. Standards in Radio Technical Commission for Aeronautics (RTCA) DO 217 provide for certification of the ground station, data link and airborne receiver as a total system. The total system approval is unique to a given runway.

- abbreviation: SCAT I

Fr: catégorie I spéciale

special emergency

U.S.: Expression for: **acts of unlawful interference**

special-use airspace

Airspace classified as:

- (a) Class F advisory (CYA), Class F restricted (CYR) or Class F danger (CYD), which can be controlled airspace, uncontrolled airspace or a combination of both;
- (b) military operations area (MOA), (below FL 180 in the U.S.);
- (c) ATC-assigned airspace (Military Area) (ATCAA) (FL 180 and above in the U.S.);
- (d) airspace restricted by NOTAM for forest fire aircraft operating restrictions; and
- (e) other airspace restricted by NOTAM to cover specific situations such as oil-well fires, disaster areas, etc.

• abbreviation: SUA

Fr: espace aérien à usage spécial

special VFR flight

A visual flight authorized by an ATC unit to operate within a control zone (CZ) under meteorological conditions that are below visual meteorological conditions (VMC).

• abbreviation: SVFR

Fr: vol VFR spécial

speed adjustment

An ATC procedure used to request pilots to adjust aircraft speed to a specific value to provide the desired separation.

Fr: réglage de la vitesse

speed brake

Movable aerodynamic devices on aircraft that reduce indicated airspeed.

• also called: dive brake

Fr: aérofrein

sponsor

The person or agency responsible for the organization and conduct of a special aviation event.

Fr: organisateur

squawk (to)

To activate a specific mode, code or function on an aircraft transponder.

Fr: afficher

“Squawk ident”

A request for a pilot to activate the aircraft transponder identification feature.

Fr: « Affichez ident »

SSR

Abbreviation for: **secondary surveillance radar**

Fr: SSR

SSR code

A four-digit octal number received from the aircraft transponder when it is interrogated by a secondary surveillance radar (SSR).

Fr: code SSR

SSR mode

A letter or number assigned to a specific pulse spacing of the interrogation signals transmitted by an interrogator.

• also called: mode

Fr: mode SSR

stack

Other expression for: **holding stack**

standard altimeter setting

A pressure setting of 29.92 in. that, when set on the subscale of the sensitive altimeter, will cause the altimeter to read zero when at mean sea level.

Fr: calage altimétrique standard

standard instrument departure

(1) A preplanned IFR departure procedure requiring ATC clearance and published for pilot/controller use to provide obstacle clearance and a transition from an aerodrome to the appropriate en-route structure.

Note: SIDs are published in the *Canada Air Pilot* (CAP) for pilot and controller use. SIDs may be either:

(a) pilot navigation SIDs: SIDs where the pilot is required to use the applicable SID chart as reference for navigation to the en-route phase; or

(b) vector SIDs: SIDs established where ATC will provide radar navigational guidance to a filed or assigned route, or to a fix depicted on the applicable SID chart. Pilots are expected to use the SID chart as a reference for navigation until the vector is commenced.

- abbreviation: SID

Note: This abbreviation is pronounced as a spoken word.

- see also: **instrument departure procedure** and **obstacle departure procedure** (ODP)

Fr: départ normalisé aux instruments

(2) ICAO: A designated instrument flight rules (IFR) departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally on a designated ATS route, at which the en-route phase of a flight commences.

- abbreviation: SID

Fr: départ normalisé aux instruments

standard instrument departure chart

An aeronautical chart designed to expedite clearance delivery and to facilitate transition between takeoff and en-route operations. Each standard instrument departure (SID) procedure is presented as a separate chart and may serve a single airport or more than one airport in a given geographical location.

Fr: carte de départ normalisé aux instruments

standard pressure region

All Canadian Domestic Airspace (CDA) that is not designated as the altimeter setting region.

Fr: région d'utilisation de la pression standard

standard terminal arrival

An IFR ATC arrival procedure published in the *Canada Air Pilot* (CAP) for pilot and controller use.

- abbreviation: STAR

Fr: arrivée normalisée en région terminale

standard terminal arrival chart

An aeronautical chart designed to expedite ATC arrival procedures and to facilitate transition between en-route and instrument approach operations. Each standard terminal arrival (STAR) procedure is presented as a separate chart and may serve a single airport or more than one airport in a given geographical location.

Fr: carte d'arrivée normalisée en région terminale

“Standby”

An expression used in radiocommunication meaning “Wait and I will call you.”

Note: The caller would normally re-establish contact if the delay is lengthy. “Standby” is not an approval or denial.

Fr: « Attendez »

STAR

Abbreviation for: **standard terminal arrival**

Fr: STAR

State aircraft

(1) Canada: An aircraft owned by and used exclusively in the service of a government in Canada or a foreign state.

Fr: aéronef d'État

(2) ICAO: An aircraft used for military, customs, police or other law enforcement services of a State.

Fr: aéronef d'État

station

One or more transmitters or receivers, or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service.

Fr: station

stepdown fix

A fix permitting additional descent within a segment of an instrument approach procedure (IAP) by identifying the point at which a controlling obstacle has been safely overflown.

Fr: repère de descente par paliers

STOL aircraft

Other expression for: **short takeoff and landing aircraft**

stop-and-go

A procedure in which an aircraft lands, makes a complete stop on the runway, and then commences a takeoff from that point.

Fr: arrêt-décollé

“Stop buzzer”

An expression used in a situation where electronic countermeasures (ECM) should only be stopped when radar is essential to cope with traffic, and interference is such that it creates an emergency flight-safety situation.

Fr: « Arrêtez l'avertisseur »

stopover flight plan

A flight-plan format that, in a single submission, permits the filing of a sequence of VFR flights through interim full-stop destinations to a final destination.

Fr: plan de vol avec escales

“Stop squawk”

An expression used by ATC to tell the pilot to turn off the specified mode, code or function of the aircraft transponder.

Fr: « Cessez d'afficher »

stopway

A defined rectangular area on the ground at the end of the runway in the direction of takeoff prepared as a suitable area in which an aeroplane can be stopped in the case of an aborted takeoff.

Fr: prolongement d'arrêt

straight-in approach

(1) A VFR approach in which the aircraft enters the aerodrome traffic circuit on the final leg without having executed any other part of the circuit.

Fr: approche directe

(2) An IFR approach in which the aircraft begins the final approach without first having executed a procedure turn (PT).

Fr: approche directe

strategic lateral offset procedure

An approved procedure that allows aircraft to fly on a parallel track to the right of the centre line relative to the direction of flight to mitigate the lateral overlap probability due to increased navigation accuracy and wake turbulence encounters.

- abbreviation: SLOP

Fr: procédure de décalage latéral stratégique

structured airspace

Certain portions of domestic airspace that will be structured for one-way traffic during times of peak traffic. Flight levels (FL) that are inappropriate for the direction of flight may be assigned to this traffic.

Fr: espace aérien structuré

SUA

Abbreviation for: **special-use airspace**

Fr: SUA

SUADE

Abbreviation for: **air sovereignty test**

Fr: SUADE

subsonic flight

Flight at a speed lower than Mach 1.

Fr: vol subsonique

“Super”

An expression used to specifically identify the Airbus A-380-800 (A388) and the Antonov An-225 (A225) in a separate and heavier category than that of “heavy” aircraft.

- see also: “**Heavy**”, “**Large**”, **light aircraft**, **medium aircraft**, “**Small**”, and **wake turbulence**

Fr: « Super »

super high frequency

The frequency band between 3 and 30 GHz.

- abbreviation: SHF

Fr: fréquence supérieure

supersonic flight

Flight at a speed above Mach 1.

Fr: vol supersonique

surface weather observation

An aviation weather report describing the weather conditions at a specified location and at a specified time, as observed from the ground. Regular observations are made on the hour, and special observations are made as necessary to report a significant change in the weather.

Fr: observations météorologiques de surface

surveillance

A function of a system that provides identification and accurate position information on aircraft, vehicles and obstacles within the designated area.

Fr: surveillance

surveillance approach

(1) An emergency radar approach provided by ATC intended to assist an aircraft in executing an approach and landing.

Fr: approche au radar de surveillance

- (2) U.S. Military: An instrument approach wherein the air traffic controller issues instructions, for pilot compliance, based on aircraft position in relation to the final approach course (azimuth) and the distance (range) from the end of the runway as displayed on the controller's radar scope. The controller will provide recommended altitudes on final approach if requested by the pilot.

surveillance radar

Radar equipment used to determine the position of an aircraft in range and azimuth.

Fr: radar de surveillance

survival ELT

An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency and activated by survivors. Automatic activation may apply.

- abbreviation: ELT(S)
- see also: **emergency locator transmitter (ELT)**

Fr: ELT de survie

SVFR

Abbreviation for: **special VFR flight**

Fr: SVFR

4.21 – T –

TA

(1) Abbreviation for: **traffic advisory**

Fr: TA

(2) Abbreviation for: **transition area**

Fr: TA

TAA

Abbreviation for: **terminal arrival area**

Fr: TAA

TACAN

Abbreviation for: **tactical air navigation system**

Fr: TACAN

tactical air navigation system

An ultrahigh frequency electronic rho-theta navigational aid system that provides suitably equipped aircraft with a continuous indication of bearing and distance to a selected station.

- abbreviation: TACAN

Fr: système de navigation aérienne tactique

takeoff

(1) In respect of an aircraft other than an airship or a balloon, the act of leaving a supporting surface, including the takeoff run and the acts immediately preceding and following the leaving of that surface.

Fr: décollage

(2) In respect of an airship or a balloon, the act of freeing the airship from restraint, including the acts immediately preceding and following the freeing of that airship or balloon from restraint.

Fr: décollage

takeoff alternate aerodrome

An alternate aerodrome at which an aircraft can land should this become necessary shortly after takeoff and it is not possible to use the aerodrome of departure.

- see also: **alternate aerodrome**

Fr: aérodrome de dégagement au décollage

takeoff time

Other expression for: **departure time**

target

The indication on a radar display of a primary surveillance radar (PSR) echo or a transponder reply.

- see also: **present position symbol** (PPS)

Fr: cible

target discrimination

The ability of a surveillance or guidance system to identify or engage any one target when multiple targets are present.

Fr: discrimination des objectifs

target monitor

The military personnel responsible for monitoring the progress of and providing safety to faked aircraft in accordance with safe-intercept criteria, beginning at the initial point or H-hour control line (IP/HHCL) and terminating at the bomb release line or end exercise point (BRL/EEP), or at the point of final neutralization.

Fr: surveillant de cible

tarmac

Other expression for: **apron**

TAS

Abbreviation for: **true airspeed**

Fr: TAS

TAWS

Abbreviation for: **terrain awareness and warning system** or **terrain awareness warning system**

Fr: TAWS

taxi

The movement of an aircraft on the surface of an aerodrome under its own power, excluding takeoff and landing.

- also called: ground-taxi

Fr: circulation au sol

taxi chart

An aeronautical chart designed to expedite the efficient and safe flow of ground traffic at an airport. These charts are identified by the official airport name.

Fr: carte de circulation

taxi patterns

Patterns established to illustrate the desired flow of ground traffic for the different runways or aerodrome areas available for use.

Fr: plan de circulation au sol

“Taxi to holding point”

ICAO: Expression for “**Taxi via . . .**”

“Taxi via . . .”

Canada: An expression used in radiocommunications to instruct a pilot to taxi to a point situated 200 ft from the edge of the runway and to stop there.

Note: Used in conjunction with one or several taxiways.

Fr: « Circulez via... »

“Taxi via . . . hold short of runway . . .”

U.S.: Expression for “**Taxi via . . .**”

taxiway

A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including

- (a) the aircraft stand taxilane;
- (b) the high speed taxiway; and
- (c) the pathway for the air, hover or ground taxiing of helicopters.

- abbreviation: TWY

Fr: voie de circulation

taxiway lights

Lights marking a taxiway.

Fr: feux de voie de circulation

TC

Abbreviation for: **Transport Canada**

Fr: TC

TCA

Abbreviation for: **terminal control area**

Fr: TCA

TC AIM

Canada: Abbreviation for: **Transport Canada Aeronautical Information Manual**
Fr: AIM de TC

TCAS

Abbreviation for: **traffic alert and collision avoidance system**
Fr: TCAS

TCH

Abbreviation for: **threshold crossing height**
Fr: TCH

TCU

Abbreviation for: **terminal control unit**
Fr: TCU

TDZ

Abbreviation for: **touchdown zone**
Fr: TDZ

TDZE

Abbreviation for: **touchdown zone elevation**
Fr: TDZE

TDZL

Abbreviation for: **touchdown zone lighting**
Fr: TDZL

Telephone Information Briefing Service

U.S.: Expression for: **pilots' automatic telephone weather answering system (PATWAS)**
• abbreviation: TIBS

temporary flight restriction

U.S.: Type of Notice to Airmen (NOTAM) that defines an area in which air travel is restricted due to a hazardous condition, a special event, or a general warning for the entire FAA airspace.
• abbreviation: TFR
• see also: **airspace classification** (f)

terminal area

A general term used to describe airspace in which approach control service or ATC service is provided.
• see also: **terminal control area** (TCA)
Fr: région terminale

terminal area entry fix

A significant point located along the established en-route structure over which an aircraft cleared for a standard terminal arrival (STAR) or an RNAV STAR is required to enter the terminal area.
• also called: bedpost
Fr: repère d'entrée de région terminale

terminal arrival area

- (1) An area, bounded by tracks and distances to identified waypoints, depicted on select GNSS approach charts indicating altitudes that provide a minimum clearance of 1000 ft above all obstacles.
• abbreviation: TAA
Fr: région terminale d'arrivée
- (2) U.S.: The TAA is controlled airspace established in conjunction with the Standard or Modified T and I RNAV approach configurations. In the standard TAA, there are three areas: straight-in, left

base, and right base. The arc boundaries of the three areas of the TAA are published portions of the approach and allow aircraft to transition from the en-route structure direct to the nearest IAF. TAAs will also eliminate or reduce feeder routes, departure extensions, and procedure turns or course reversal.

- abbreviation: TAA

terminal control area

(2) A controlled airspace of defined dimensions that is normally established in the vicinity of one or more major aerodromes and within which ATC service is provided based on the airspace classification.

- abbreviation: TCA

- see also: **terminal area**

Fr: région de contrôle terminal

(3) U.S.: A controlled airspace extending upward from the surface or higher to specified altitudes, within which all aircraft are subject to operating rules and to pilot and equipment requirements specified in FAR 91.

- abbreviation: TCA

- see also: **terminal area**

terminal controller

A duty controller assigned to the terminal control position.

Fr: contrôleur terminal

terminal control service

A control service provided by area control centres (ACC) and military terminal control units (MTCU) to aircraft operating within specified control areas.

- see also: **approach control service**

Fr: service de contrôle terminal

terminal control unit

An ATC unit that provides ATC service to aircraft operating within or in the vicinity of a terminal control area (TCA).

Note: This type of unit no longer exists, but the term is still widely used.

- abbreviation: TCU

Fr: unité de contrôle terminal

terminal occupancy value

The maximum number of arriving aircraft that the terminal airspace can accommodate while meeting the objectives of the metering program.

- abbreviation: TOV

Fr: valeur d'occupation de l'espace aérien terminal

terminal radar service area

U.S.: Airspace surrounding designated airports wherein ATC provides radar vectoring, sequencing, and separation on a full-time basis for all IFR and participating VFR aircraft.

- abbreviation: TRSA

terrain awareness and warning system

An aircraft system that is intended to provide a flight crew with alerts to aid in preventing controlled flight into terrain, obstacles or water.

- abbreviation: TAWS

- also called: terrain awareness warning system

- see also: **ground proximity warning system (GPWS)**

Fr: système d'avertissement et d'alarme d'impact

terrain awareness warning system

Other expression for: **terrain awareness and warning system (TAWS)**

Fr: TAWS

terrain following

The flight of a military aircraft maintaining a constant altitude above ground level (AGL) above the terrain or the highest obstacle. The altitude of the aircraft will constantly change with varying terrain and obstacles.

- abbreviation: TF
- Fr: suivi de relief*

test flight

A flight for the purpose of investigating the operational and flight characteristics of an aircraft or an aircraft component.

- see also: **flight test**
- Fr: vol d'essai*

TF

Abbreviation for: **terrain following**

Fr: TF

TFR

U.S.: Abbreviation for: **temporary flight restriction**

3LD

Abbreviation for: **three-letter designator**

- see: **ICAO three-letter designator (ICAO 3LD)**

Fr: 3LD

three-letter designator

Other expression for: **ICAO three-letter designator (ICAO 3LD)**

- abbreviation: 3LD

360 overhead

Other expression for: **overhead break**

threshold

The beginning of the portion of the runway usable for landing.

Fr: seuil

threshold crossing height

The height of the glide path (GP) above the runway threshold.

- abbreviation: TCH

Fr: hauteur de franchissement du seuil

threshold lights

Lights placed across the ends of a runway or landing strip to indicate its usable limits.

Fr: feux de seuil

TIBS

U.S.: Abbreviation for: **Telephone Information Briefing Service**

- see: **pilots' automatic telephone weather answering system (PATWAS)**

“Tighten your approach”

An expression used by ATC to ask a pilot to shorten his or her aerodrome traffic circuit.

Fr: « Gardez le circuit serré »

tiltrotor aircraft

A rotorcraft with the axes of the power-driven proprotor blades capable of pivoting from vertical for vertical takeoff, landing, and hover operations to horizontal to derive lift from the wing in cruise.

Fr: aéronef à rotors basculants

time of activation

The time, expressed in Coordinated Universal Time (UTC), at which an aircraft departs from, or is estimated to arrive over, a specified point of activation.

Fr: heure d'activation

TLOF

Abbreviation for: **touchdown and lift-off area**

Fr: TLOF

TMA

ICAO: Abbreviation for: **terminal control area (TCA)**

Fr: TMA

TOD

Abbreviation for: **top of descent**

Fr: TOD

top of descent

The computed point between the cruise or en-route phase and the descent phase of a flight.

- abbreviation: TOD

Fr: début de descente

torching

The burning of fuel at the end of an exhaust pipe or stack of a reciprocating aircraft engine resulting from an excessive richness in the fuel/air mixture.

Fr: coup de chalumeau

total EET

Abbreviation for: **total estimated elapsed time**

total estimated elapsed time

(1) For IFR flights, the estimated time required from takeoff to arrive over the designated point, defined by reference to NAVAIDs, from which it is intended that an instrument approach procedure (IAP) will be commenced or, if no NAVAID is associated with the destination aerodrome, to arrive over the destination aerodrome.

- abbreviation: total EET

Fr: durée totale estimée

(2) For VFR flights, the estimated time required from takeoff to arrive over the destination aerodrome.

- abbreviation: total EET

Fr: durée totale estimée

touch-and-go

A procedure in which an aircraft lands and then takes off without stopping.

Fr: posé-décollé

touchdown

Other expression for: **touchdown point (1)**

touchdown and lift-off area

A load-bearing area on which a helicopter may touch down or lift off.

- abbreviation: TLOF

Fr: aire de prise de contact et d'envol

touchdown autorotation

Other expression for: **autorotation to touchdown**

touchdown pad

The load-bearing portion of a designated helicopter landing and takeoff area on which a helicopter may alight.

Fr: plate-forme de poser

touchdown point

(1) The point at which an aircraft first makes contact with the landing surface.

- also called: touchdown

Fr: point de poser

(2) The point where the nominal glide path (GP) intercepts the runway.

Note: The touchdown point, as defined above, is only a datum and is not necessarily the actual point at which the aircraft will touch the runway.

Fr: point d'atterrissage

touchdown RVR

The RVR readout values obtained from RVR equipment serving the touchdown zone.

Fr: RVR au point de poser

touchdown zone

The first 3000 ft of the runway or the first third of the runway, whichever is less, measured from the threshold in the direction of landing.

- abbreviation: TDZ

Fr: zone de poser

touchdown zone elevation

The highest centreline elevation in the touchdown zone.

- abbreviation: TDZE

Fr: altitude de zone de poser

touchdown zone lighting

Variable-intensity white lighting in the touchdown zone consisting of bars of three inset lights per bar situated on either side of the runway centreline at 100-ft intervals, commencing 100 ft from the threshold and extending 3000 ft down the runway. The lights are unidirectional, showing in the direction of approach to landing.

- abbreviation: TDZL

Fr: balisage lumineux de zone de poser

touchdown zone marking

A marking provided in the touchdown zone of a precision approach runway consisting of pairs of rectangular markings symmetrically disposed about the runway centreline.

Fr: marque de zone de poser

TOV

Abbreviation for: **terminal occupancy value**

Fr: TOV

tower

Other expression for: **control tower** (TWR)

tower control

A control service provided by an airport controller to aircraft and vehicles on active runways and to aircraft in the vicinity of a controlled airport.

- also called: airport control

- see also: **airport control service**

Fr: contrôle tour

tower radar area

An area of defined dimensions surrounding a controlled aerodrome within which radar service is provided.

- abbreviation: TRA

Fr: zone radar de tour

tower radar plan

A plan containing the rules and procedures applicable in a tower radar area (TRA).

- abbreviation: TRP

Fr: plan radar de tour

TRA

Abbreviation for: **tower radar area**

Fr: TRA

trace icing

An atmospheric condition in which ice becomes perceptible, the rate of accumulation being slightly greater than the rate of sublimation. It is not hazardous, even when de-icing or anti-icing equipment is not utilized, unless encountered for periods of more than 1 hr.

- see also: **light icing**, **moderate icing**, and **severe icing**

Fr: trace de givrage

track

The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from true, magnetic or grid north.

Fr: route

traffic advisory

An advisory issued by airborne collision avoidance system (ACAS)/traffic alert and collision avoidance system (TCAS) to alert pilots to other air traffic that may be in such proximity to the position or intended route of flight of their aircraft as to warrant their attention.

- abbreviation: TA

Fr: avis de trafic

traffic alert and collision avoidance system

A type of airborne collision avoidance system (ACAS) based on a family of airborne equipment that functions independently of the ground-based ATC system to detect potential conflicting aircraft that are equipped with secondary surveillance radar (SSR) transponders. There are three different versions: TCAS I provides traffic advisories; TCAS II provides traffic advisories and vertical resolution advisories (RA); and TCAS IV, when developed, will provide traffic advisories and vertical and horizontal RAs.

- abbreviation: TCAS

- see also: **airborne collision avoidance system (ACAS)**

Fr: système d'avertissement de trafic et d'évitement d'abordage

traffic circuit

Other expression for: **aerodrome traffic circuit**

traffic information

Information issued by ATS to pilots regarding other known or observed traffic that may be in such proximity to their position or intended route as to warrant their attention.

Fr: renseignements sur le trafic

“Traffic in sight”

An expression used by pilots to inform a controller that traffic described in the previously issued traffic information is in sight.

Fr: « Trafic en vue »

traffic pattern

Other expression for: **aerodrome traffic circuit**

transborder flight

A flight conducted between Canada and the U.S.

Fr: vol transfrontalier

transcribed weather broadcast

U.S.: A continuous recording of meteorological and aeronautical information that is broadcast on L/MF and VOR facilities for pilots.

- abbreviation: TWEB

transfer of control

A transfer of the responsibility for providing ATC service from one ATC unit to another.

Fr: transfert de contrôle

transferring unit

An ATC unit that is in the process of transferring the responsibility for providing ATC service to an aircraft to the next ATC unit along the route of flight.

Fr: unité transférante

transition

(1) The general term that describes the change from one phase of flight or flight conditions to another, e.g. transition from en-route flight to the approach or transition from instrument flight to visual flight.

Fr: transition

(2) A published procedure used to connect the basic standard instrument departure (SID) to one or more en-route airways or to connect one or more en-route airways to the basic standard terminal arrival (STAR). More than one transition may be published in the associated SID or STAR.

Fr: transition

(3) Other expression for: **feeder route**

transition altitude

The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.

Fr: altitude de transition

transition area

An area of defined dimensions, established when it is deemed advantageous or necessary to provide additional controlled airspace for the containment of IFR operations, extending upwards from 700 ft AGL unless otherwise specified, to the base of overlying controlled airspace.

- abbreviation: TA

Fr: zone de transition

transition level

The lowest flight level available for use above the transition altitude.

Fr: niveau de transition

transmissometer

An apparatus used to determine visibility by measuring the transmission of light through the atmosphere. It is the measurement source for determining runway visual range (RVR).

Fr: transmissomètre

“Transmitting (in the) blind”

An expression used to indicate that a blind transmission is being conducted.

- see also: **blind transmission**

Fr: « Transmets sans accusé de réception »

transponder

A receiver and transmitter that will generate a reply signal upon proper interrogation, the interrogation and reply being on different frequencies.

Fr: transpondeur

transponder airspace

A controlled airspace of defined dimensions within which a functioning transponder incorporating an automatic pressure-altitude reporting device is required.

Fr: espace aérien à utilisation de transpondeur

transponder code

The number assigned to a particular multiple-pulse reply signal transmitted by a transponder.

Fr: code de transpondeur

Transportation Safety Board of Canada

The federal agency conducting independent investigations and public inquiries into transportation occurrences, including aviation occurrences, to advance transportation safety.

- abbreviation: TSB

Fr: Bureau de la sécurité des transports du Canada

Transport Canada

The federal authority responsible for the regulation of civil aviation.

- abbreviation: TC

Fr: Transports Canada

Transport Canada Aeronautical Information Manual

A primary Transport Canada publication of aeronautical information intended to serve as a pre-flight reference source for pilots and that contains information essential to aircraft operations in Canadian Domestic Airspace (CDA). It consolidates information of a lasting nature into a single document.

Topics covered are general flight information, communications, meteorology, rules of the air and ATC procedures, entry and departure requirements for international flights, search and rescue, aeronautical charts and publications, licensing and registration, health, and airmanship.

- abbreviation: TC AIM

- see also: **AIP Canada (ICAO)**

Fr: Manuel d'information aéronautique de Transports Canada

TRP

Abbreviation for: **tower radar plan**

Fr: TRP

TRSA

U.S.: Abbreviation for: **terminal radar service area**

true airspeed

The airspeed of an aircraft relative to undisturbed air.

Note: True airspeed is used primarily in flight planning and the en-route portion of flight. When used in pilot/controller communications, it is referred to as “true airspeed” and not shortened to “airspeed.”

- abbreviation: TAS

Fr: vitesse vraie

true Mach number

A ratio of the true airspeed of an aircraft to the local speed of sound at the flight altitude.

Fr: nombre de Mach vrai

TSB

Abbreviation for: **Transportation Safety Board of Canada**

Fr: BST

turbojet aircraft

An aircraft having a jet engine in which the energy of the jet operates a turbine, which, in turn, operates the air compressor.

Fr: aéronef à turboréacteur

turboprop aircraft

An aircraft that derives most of its propulsive power from the thrust developed by a turbojet engine having a turbine-driven propeller.

Fr: aéronef à turbopropulseur

turbulence

An atmospheric phenomenon that causes changes in aircraft altitude, attitude, and/or airspeed with aircraft reaction depending on intensity, which is reported by pilots as follows:

- (a) light, when it momentarily causes slight, erratic changes in altitude or attitude;
- (b) moderate, when it causes changes in altitude or attitude, and usually variations in indicated airspeed (IAS), but the aircraft remains in control at all times; or
- (c) severe, when it causes large, abrupt changes in altitude or attitude, and usually large variations in IAS, and the aircraft may be momentarily out of control.

• see also: **chop**

Fr: turbulence

turnoff taxiway

Other expression for: **high speed taxiway**

TWEB

U.S.: Abbreviation for: **transcribed weather broadcast**

TWR

Abbreviation for: **control tower**

Fr: TWR

TWY

Abbreviation for: **taxiway**

Fr: TWY

4.22 – U –

UA

U.S. and ICAO: Abbreviation for: **unmanned aircraft**

Fr: UA

UAS

U.S. and ICAO: Abbreviation for: **unmanned aircraft system**

Fr: UAS

UAV

Abbreviation for: **unmanned air vehicle**

Fr: UAV

UHF

Abbreviation for: **ultrahigh frequency**

Fr: UHF

ultrahigh frequency

The frequency band between 300 and 3000 MHz.

- abbreviation: UHF

Fr: ultra-haute fréquence

ultralight aeroplane

An advanced ultralight aeroplane or a basic ultralight aeroplane.

- see: **advanced ultralight aeroplane, basic ultralight aeroplane**

Fr: avion ultra-léger

“Unable”

An expression that indicates inability to comply with a specific instruction, request or clearance.

Fr: « Incapable »

uncertainty phase

(1) Canada: A phase that begins when:

- (a) with the exception of an arrival report, no communication has been received from an aircraft within 30 min after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is the earlier;
- (b) a flight plan (FP) has been filed and no arrival report has been received by the area control centre (ACC)
 - (i) within 1 hr after the estimated time of arrival (ETA) last notified to or estimated by the ACC, whichever is later;
 - (ii) at the search and rescue (SAR) time requested by the originator, whichever is earlier;
- (c) a flight itinerary (FI) has been filed and no arrival report has been received by the ACC
 - (i) within 24 hrs after the latest ETA; or
 - (ii) at the SAR time requested by the originator, whichever is earlier;
- (d) an FP or FI has been filed and it is determined that no arrival report can be expected either because there is no communication system serving the point of arrival or the system serving the airport is inoperative.

- see also: **emergency phase**

Fr: phase d'incertitude

(2) ICAO: A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

- abbreviation: INCERFA

- see also: **emergency phase**

Fr: phase d'incertitude

uncontrolled aerodrome

An aerodrome at which a control tower has not been established. This designation also applies during the non-operational period when an established control tower is on reduced hours (part time).

Fr: aérodrome non contrôlé

uncontrolled airspace

Class G and specified Class F airspace within which ATC service is not provided.

Fr: espace aérien non contrôlé

under the hood

An expression indicating that the pilot is using a hood to restrict visibility outside the cockpit while simulating instrument flight. An instrument-rated pilot is required in the other control seat while this operation is being conducted.

Fr: sous la visière

under way

The state of being on the surface of the water but not moored or fastened to any fixed object on the land or in the water.

Fr: en marche

UNICOM

Abbreviation for: **universal communications**

Fr: UNICOM

uninterruptible power supply

In ATS operations, a power system that is not subjected to any interruption when a break occurs in the normal power supply.

Note: A UPS is required for precision approach CAT II and precision approach CAT III instrument landing system (ILS) operations.

- abbreviation: UPS

Fr: alimentation sans coupure

universal

Spoken expression for: **Coordinated Universal Time**

- other spoken expression: zulu

Fr: universel

universal communications

An air-ground communication facility operated by a private agency to provide private advisory station (PAS) service at uncontrolled aerodromes and airports with no ATS air-ground communication facility.

- abbreviation: UNICOM

Fr: communications universelles

unmanned aircraft

(1) U.S.: An aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.

(2) ICAO: An aircraft which is intended to operate with no pilot on board.

- abbreviation: UA

• see also: **beyond visual line of sight (BVLOS)**, **model aircraft**, **remotely piloted aircraft (RPA)**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft system (UAS)**, **unmanned air vehicle (UAV)**, and **visual line of sight (VLOS)**

Fr: aéronef sans pilote

unmanned aircraft system

(1) U.S.: An unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system.

(2) ICAO: An aircraft and its associated elements which are operated with no pilot on board.

- abbreviation: UAS

- see also: **beyond visual line of sight (BVLOS)**, **model aircraft**, **remotely piloted aircraft (RPA)**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft (UA)**, **unmanned air vehicle (UAV)**, and **visual line of sight (VLOS)**

Fr: système d'aéronef sans pilote

unmanned air vehicle

A power-driven aircraft, other than a model aircraft, that is designed to fly without a human operator on board.

Note: This term was replaced by **remotely piloted aircraft system (RPAS)** in June 2019.

- abbreviation: UAV

- see also: **beyond visual line of sight (BVLOS)**, **model aircraft**, **remotely piloted aircraft (RPA)**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft (UA)**, **unmanned aircraft system (UAS)**, and **visual line of sight (VLOS)**

Fr: véhicule aérien non habité

UPS

Abbreviation for: **uninterruptible power supply**

Fr: UPS

upwind leg

A flight path parallel to the landing runway in the direction of landing.

Fr: étape vent debout

urgency

Condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight, but which does not require immediate assistance. The spoken word for urgency is PAN PAN, and it is pronounced three times.

- see also: "**PAN PAN**"

Fr: urgence

urgent PIREP

A pilot report containing weather information significant to the safety of flight. An urgent PIREP includes information on the following:

- (a) volcanic ash;
- (b) tornadoes, funnel clouds, waterspouts;
- (c) severe turbulence;
- (d) severe icing;
- (e) hail;
- (f) low-level wind shear; and
- (g) any other reported weather phenomena considered to be hazardous or potentially hazardous to flight operations.

Fr: PIREP urgent

user agency

The agency, organization or military command responsible for the activity for which Class F airspace has been provided. The user agency shall be identified for Class F restricted areas, military operations areas, and danger areas and, where possible, should be identified for Class F advisory areas.

Fr: organisme utilisateur

UTC

Written abbreviation for: **Coordinated Universal Time**

- other written abbreviation: Z

Fr: UTC

4.23 – V –

VAGS

Canada: Abbreviation for: **visual alignment guidance system**
Fr: VAGS

VASI

Abbreviation for: **visual approach slope indicator**
Fr: VASI

VCOA

(1) Abbreviation for: **visual climb over the airport**
Fr: VCOA
(2) U.S.: Abbreviation for: **visual climb over airport**

VCS

Abbreviation for: **vehicle control service**
Fr: VCS

VDF service

Abbreviation for: **VHF direction-finding service**
Fr: service VDF

VDP

U.S.: Abbreviation for: **visual descent point**

vector

A heading given by a controller to a pilot on the basis of radar-derived information to provide navigational guidance.

- also called: radar vectoring

Fr: vecteur

veer-off

A type of runway excursion in which an aircraft exits the side of the runway, having failed to confine its takeoff, landing or ground manoeuvring to the runway.

- see also: **overrun** and **runway excursion**

Fr: sortie de piste latérale

vehicle control service

The provision, by FSSs, of commands and instructions to control the movements of ground traffic on manoeuvring areas at designated uncontrolled aerodromes.

- abbreviation: VCS

Fr: service de contrôle de véhicules

vehicle corridor

A space delineated by parallel, 5.9-in.-wide, solid white lines spaced 24.6 ft apart to provide guidance to vehicle and equipment operators.

Fr: corridor pour véhicules

vented fuel

ICAO: Usable fuel that is intentionally or unintentionally released while the aircraft is airborne.

Fr: décharge de carburant

“Verify your altitude”

An expression used by ATC to validate the altitude readouts from the aircraft’s encoding transponder.

Fr: « Vérifiez votre altitude »

vertical navigation

An RNAV function that calculates, displays and provides guidance to maintain a vertical profile or path.

- abbreviation: VNAV
- see also: **approach procedure with vertical guidance (APV)**, **barometric vertical navigation (baro-VNAV)**, **lateral navigation (LNAV)**, **localizer performance with vertical guidance (LPV)**, and **localizer performance without vertical guidance (LP)**

Fr: navigation verticale

vertical separation

The separation between aircraft expressed in units of vertical distance.

Fr: espacement vertical

vertical takeoff and landing aircraft

An aircraft capable of vertical climbs and descents and of using very short runways or small areas for takeoff and landing. These aircraft include, but are not limited to, helicopters.

- also called: VTOL aircraft

Fr: aéronef à décollage et atterrissage verticaux

vertigo

The sensation of movement of the body or its surroundings which is at variance with the physical state.

Fr: vertige

very high frequency

The frequency band between 30 and 300 MHz.

- abbreviation: VHF

Fr: très haute fréquence

very low frequency

The frequency band between 3 and 30 kHz.

- abbreviation: VLF

Fr: très basse fréquence

VFR

Abbreviation for: **visual flight rules**

Fr: VFR

VFR aircraft

An aircraft operated in accordance with visual flight rules (VFR).

Fr: aéronef VFR

VFR control service

A service provided by ATC units including:

- (a) tower control; and
- (b) ground control.

Fr: service de contrôle VFR

VFR flight

A flight conducted in accordance with visual flight rules (VFR).

Fr: vol VFR

VFR holding procedure

The holding of aircraft in an orbital path around selected prominent geographical locations that can be easily recognized from the air.

Fr: procédure d'attente VFR

VFR navigation chart

An aeronautical chart (using a scale of 1:500 000) designed for visual navigation of slow- or medium-speed aircraft. Topographic information on these charts features the portrayal of relief and a judicious selection of visual checkpoints for VFR flight. Aeronautical information includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstacles, and related data.

- abbreviation: VNC

Fr: carte aéronautique de navigation VFR

VFR-on-top

U.S.: ATC authorization for an IFR aircraft to operate in VFR conditions at any appropriate VFR altitude (as specified in the FARs and as restricted by ATC).

Note: VFR-on-top is not permitted in Canada.

VFR OTT

Abbreviation for: **VFR over-the-top**

Fr: VFR OTT

VFR over-the-top

A VFR flight during daylight in which a pilot climbs in visual meteorological conditions (VMC), proceeds en route above inclement weather, and descends in VMC at a destination that had been forecast for conditions surpassing VMC for a period extending before and after the estimated time of arrival (ETA).

- abbreviation: VFR OTT

Note: VFR over-the-top does not exist in the U.S.

Fr: vol VFR au-dessus de la couche

VFR terminal area chart

An aeronautical chart (using a scale of 1:250 000) that depicts terminal control area (TCA) airspace, which provides for the control or segregation of all aircraft within the TCA. The chart depicts topographic information and aeronautical information, which includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstacles, and related data.

- abbreviation: VTA

Fr: carte de région terminale VFR

VGSI

Abbreviation for: **visual glide slope indicator**

Fr: VGSI

VHF

Abbreviation for: **very high frequency**

Fr: VHF

VHF direction-finding service

A service by which navigation assistance is provided to VFR aircraft, as described in the “Communications” (COM) and “Rules of the Air and Air Traffic Services” (RAC) sections of the *Transport Canada Aeronautical Information Manual* (TC AIM).

- abbreviation: VDF service

Fr: service de radiogoniométrie VHF

VHF omnidirectional range station

A ground-based electronic NAVAID that transmits very high frequency navigation signals 360° in azimuth.

- also called: VOR station

Fr: station de radiophare omnidirectionnel VHF

VIS

Abbreviation for: **visibility**

Fr: VIS

visibility

The distance at which prominent unlighted objects may be identified by day and prominent lighted objects may be identified by night.

- abbreviation: VIS

Fr: visibilité

visual alignment guidance system

(1) Canada: Lights provided for the visual approach to a runway where concerns exist due to obstacle clearance, noise abatement or traffic control procedures requiring a particular direction to be flown, or where the environment provides few visual surface cues, especially for night operations.

- abbreviation: VAGS

Fr: système visuel de guidage pour alignement

(2) ICAO: Lights provided to serve the approach to a heliport where one or more of the following conditions exist especially at night:

- (a) obstacle clearance, noise abatement or traffic control procedures require a particular direction to be flown;
- (b) the environment of the heliport provides few visual surface cues; and
- (c) it is physically impracticable to install an approach lighting system.

Fr: dispositif de guidage visuel d'alignement

visual approach

An approach wherein an aircraft on an IFR flight plan (FP), operating in visual meteorological conditions (VMC) under the control of ATC and having ATC authorization, may proceed to the airport of destination.

Fr: approche visuelle

visual approach slope indicator

A visual glide slope indicator (VGS) consisting of four light units normally situated on the left side of the runway in the form of two wing bars, referred to as the upwind and downwind wing bars, and indicating that the aircraft is on slope if the upwind bar shows red and the downwind bar shows white, too high if both bars show white, and too low if both bars show red.

- abbreviation: VASI

- see also: **abbreviated visual approach slope indicator (AVASI)** and **visual glide slope indicator (VGS)**

Fr: indicateur visuel de pente d'approche

visual climb over airport

U.S.: Other expression for: **visual climb over the airport (VCOA)**

- abbreviation: VCOA

visual climb over the airport

An IFR obstacle departure procedure in which the pilot must maintain certain visual references with the ground and obstacles until reaching a given altitude over the aerodrome.

- abbreviation: VCOA

- see also: **obstacle departure procedure (ODP)**

Fr: montée à vue au-dessus de l'aéroport

visual descent point

U.S.: A defined point on the final approach course of a nonprecision [*sic*] straight-in approach procedure from which normal descent from the minimum descent altitude (MDA) to the runway touchdown point may be commenced, provided the approach threshold of that runway, or approach lights, or other markings identifiable with the approach end of that runway are clearly visible to the pilot.

- abbreviation: VDP

visual flight rules

The rules that govern the procedures for conducting flight under visual conditions.

- abbreviation: VFR

Note: The abbreviation “VFR” is used by pilots and controllers to indicate a type of flight plan (FP) or weather conditions.

Fr: règles de vol à vue

visual glide slope indicator

An aerodrome lighting facility providing vertical visual approach slope guidance to aircraft during the approach to landing by displaying a pattern of red and white light beams that give an indication to pilots of their position in relation to the established approach slope, depending on the combinations of lights that are seen.

- abbreviation: VGSI

Note: There are four basic types of visual glide slope indicators that are used in Canada: visual approach slope indicator (VASI), abbreviated visual approach slope indicator (AVASI), precision approach path indicator (PAPI), and abbreviated precision approach path indicator (APAPI). The PAPI and APAPI are the present standard. ICAO uses the term *VASIS* for **VGSI**. Other systems, such as the T visual approach slope indicator system (T-VASIS) and the abbreviated T visual approach slope indicator system (AT-VASIS) used by ICAO and some Australian and Pacific Islands airports, are expected to be progressively phased out of service.

- see also: **abbreviated precision approach path indicator (APAPI)**, **abbreviated visual approach slope indicator (AVASI)**, **precision approach path indicator (PAPI)**, and **visual approach slope indicator (VASI)**

Fr: indicateur visuel d'alignement de descente

visual holding

U.S.: Expression for: **VFR holding procedure**

visual line of sight

Unaided visual contact with an aircraft that is sufficient to be able to maintain control of the aircraft, know its location and be able to scan the airspace in which it is operating to sense and avoid other aircraft or objects.

- abbreviation: VLOS

- see also: **beyond visual line of sight (BVLOS)**, **model aircraft**, **remotely piloted aircraft (RPA)**, **remotely piloted aircraft system (RPAS)**, **unmanned aircraft (UA)**, **unmanned aircraft system (UAS)**, and **unmanned air vehicle (UAV)**

Fr: visibilité directe

visual meteorological conditions

- (1) Canada: Meteorological conditions, expressed in terms of visibility and distance from cloud, equal to or greater than the minima specified in CAR 602.

- abbreviation: VMC

Fr: conditions météorologiques de vol à vue

- (2) ICAO and U.S.: Meteorological conditions, expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than the minima.

- abbreviation: VMC

Fr: conditions météorologiques de vol à vue

visual separation

A means used by controllers to separate aircraft operating in visual meteorological conditions (VMC).

- (a) VFR—The controller, having determined that a potential conflict exists, issues clearances, instructions and/or information as necessary to aid aircraft in establishing visual contact with each other or to assist aircraft in avoiding other aircraft.
- (b) IFR or CVFR—Following a pilot's report that the traffic is in sight, the controller issues the clearance and instructs the pilot to provide his or her own separation by manoeuvring the aircraft as necessary to avoid or follow the traffic.

Fr: espacement visuel

VLF

Abbreviation for: **very low frequency**
Fr: VLF

VLOS

Abbreviation for: **visual line of sight**
Fr: VLOS

VMC

Abbreviation for: **visual meteorological conditions**
Fr: VMC

VNAV

Abbreviation for: **vertical navigation**
Fr: VNAV

VNC

Abbreviation for: **VFR navigation chart**
Fr: VNC

VOLMET

Other expression for: **in-flight meteorological information**

VOR receiver test facility

A ground facility that emits a test signal to check VHF omnidirectional range (VOR) receiver accuracy.

- abbreviation: VOT

Fr: système de vérification de récepteur VOR

VOR station

Other expression for: **VHF omnidirectional range station**

VORTAC

A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site.

Fr: VORTAC

VOT

Abbreviation for: **VOR receiver test facility**
Fr: VOT

VTA

Abbreviation for: **VFR terminal area chart**
Fr: VTA

VTOL aircraft

Other expression for: **vertical takeoff and landing aircraft**

4.24 – W –

WA

U.S.: Abbreviation for: **weather advisory**

WAAS

U.S. and Canada: Abbreviation for: **wide area augmentation system**

Fr: WAAS

WAC

Abbreviation for: **world aeronautical chart**

Fr: WAC

WAFS

Abbreviation for: **world area forecast system**

Fr: WAFS

wake turbulence

Turbulent air behind an aircraft caused by any of the following:

- (a) wing-tip vortices;
- (b) rotor-tip vortices;
- (c) jet-engine thrust stream or jet blast;
- (d) rotor downwash;
- (e) prop wash.

• see also: “**Heavy**”, “**Large**”, **light aircraft**, **medium aircraft**, “**Small**”, and “**Super**”

Fr: turbulence de sillage

WAM

Abbreviation for: **wide area multilateration**

Fr: WAM

warning area

U.S.: A warning area is airspace of defined dimensions, extending from 3 NM outward from the coast of the United States, that contains activity that may be hazardous to nonparticipating [*sic*] aircraft. The purpose of such warning areas is to warn nonparticipating [*sic*] pilots of the potential danger. A warning area may be located over domestic or international waters or both.

way-point

ICAO: Expression for: **waypoint** (WP)

waypoint

A specified geographical location, defined by longitude and latitude, that is used in the definition of routes and terminal segments and for progress-reporting purposes.

• abbreviation: WP

Fr: point de cheminement

weather advisory

U.S.: In aviation weather forecast practice, an expression of hazardous weather conditions not predicted in the area forecast, as they affect the operation of air traffic and as prepared by the National Weather Service (NWS).

• abbreviation: WA

weather information

Other expression for: **meteorological information**

WGS-84

Abbreviation for: **World Geodetic System 1984**

Fr: WGS-84

“When able . . .”

U.S.: When used in conjunction with ATC instructions, gives the pilot the latitude to delay compliance until a condition or event has been reconciled. Unlike “. . . at pilot’s discretion”, when instructions are prefaced “When able . . .”, the pilot is expected to seek the first opportunity to comply. Once a maneuver [*sic*] has been initiated, the pilot is expected to continue until the specifications of the instructions have been met.

Note: “When able . . .” should not be used when expeditious compliance is required.

- see also: **“When ready . . .”**

“When ready . . .”

Authorization for an aircraft to comply with a clearance or instruction at some point in the future when convenient.

Fr: « Lorsque prêt... »

whiteout

An atmospheric optical phenomenon of snow-covered regions in which the observer appears to be engulfed in a uniformly white glow. Shadows, the horizon, and clouds are not discernible; depth perception and the sense of orientation are lost; and only very dark, nearby objects can be seen. Whiteout occurs over an unbroken snow cover and beneath a uniformly overcast sky when, with the aid of the snowblink effect, the light from the sky is about equal to that from the snow surface. Blowing snow may be an additional cause.

Fr: *voile blanc*

wide area augmentation system

U.S. and Canada: An augmentation system using geostationary satellites to meet en-route and terminal navigation, non-precision approach and precision approach CAT I accuracy, integrity, continuity and availability requirements.

- abbreviation: WAAS
- see also: **local area augmentation system (LAAS)**

Fr: *système de renforcement à couverture étendue*

wide area MLAT

Other expression for: **wide area multilateration (MLAT)**

wide area multilateration

An ATS surveillance method using time difference of arrival (TDOA) techniques to determine the position of aircraft in en-route and terminal airspace.

- abbreviation: WAM
- also called: wide area MLAT
- see also: **multilateration** and **multilateration system (MLAT)**

Fr: *multilatération à couverture étendue*

“Wilco”

An expression used in radiocommunication meaning “I understand your message and will comply with it.”

Note: Abbreviation for “Will comply.”

Fr: « *Wilco* »

wildlife hazard

A hazard relating to the conduct of flight operations that results from the presence of birds and other animals, primarily in the vicinity of an aerodrome.

- see also: **wildlife strike**

Fr: *péril faunique*

wildlife strike

A collision between an aircraft and wildlife.

Note: A wildlife strike is deemed to have occurred whenever

- (a) a pilot reports a wildlife strike;
- (b) aircraft maintenance personnel identify damage to an aircraft as having been caused by a wildlife strike;
- (c) personnel on the ground report seeing an aircraft strike one or more birds or other wildlife; or
- (d) bird or other wildlife remains, whether in whole or in part, are found on an airside pavement area or within 200 ft of a runway, unless another reason for the animal's death is identified.

- see also: **wildlife hazard**

Fr: impact faunique

wind cone

Other expression for: **wind direction indicator**

wind direction indicator

- (1) An indicator that is in the form of a truncated cone made of fabric and that is not less than 12 ft long and, at the larger end, not less than 3 ft in diameter, so constructed as to give a clear indication of the direction of surface wind and a general indication of wind speed.

- also called: wind cone, wind sleeve, windsock

Fr: indicateur de direction du vent

- (2) An actuated device for indicating visually to aircraft the direction of surface wind.

Fr: indicateur de direction du vent

wind shear

A change in wind speed and/or wind direction in a short distance. It can exist in a horizontal or vertical direction and occasionally in both.

- abbreviation: WS

- see also: **low-level wind shear** (LLWS)

Fr: cisaillement du vent

wind sleeve

Other expression for: **wind direction indicator**

windsock

Other expression for: **wind direction indicator**

wing-tip vortex

A circular pattern of air current created by the movement of an airfoil through the air when the airfoil is generating lift. As an airfoil moves through the atmosphere in sustained flight, an area of high pressure is created beneath it and an area of low pressure is created above it. The air flowing from the high-pressure area to the low-pressure area around and about the tips of the airfoil tends to roll up into two rapidly rotating vortices, cylindrical in shape. These vortices are the predominant parts of aircraft wake turbulence and their rotational force is dependent upon the wing loading, gross weight, and speed of the generating aircraft. The vortices from medium to heavy aircraft can be of extremely high velocity and hazardous to smaller aircraft.

Fr: tourbillon en bout d'aile

“Words twice”

An expression used in radiocommunication meaning:

- (a) when used as a request: “Communication is difficult. Please, send every word, or group of words, twice.”
- (b) when used as information: “Since communication is difficult, every word, or group of words, in this message will be sent twice.”

Fr: « Chaque mot deux fois »

world aeronautical chart

An aeronautical chart (using a scale of 1:1 000 000) that provides a standard series of aeronautical charts covering land areas of the world at a size and scale convenient for navigation by moderate-speed aircraft. Topographic information includes cities and towns, principal roads, railroads, distinctive landmarks, drainage, and relief. Aeronautical information includes visual and radio aids to navigation, airports, airways, restricted areas, obstacles, and other pertinent data.

- abbreviation: WAC

Fr: carte aéronautique du monde

world area forecast system

A worldwide system by which world area forecast centres provide aeronautical meteorological en-route forecasts in uniform standardized formats.

- abbreviation: WAFS

Fr: système mondial de prévisions de zone

World Geodetic System 1984

The geodetic coordinate reference system used in international civil aviation that allows the user to mathematically describe (in degrees of latitude and longitude) any position on the earth's surface. WGS-84 uses a global set of ground stations as references.

- abbreviation: WGS-84
- see also: **North American Datum 1983** (NAD83)

Fr: Système géodésique mondial -1984

WP

Abbreviation for: **waypoint**

Fr: WP

WPT

ICAO: Abbreviation for: **waypoint** (WP)

Fr: WPT

WS

Abbreviation for: **wind shear**

Fr: WS

4.25 – Z –

Z

Written abbreviation for: **Coordinated Universal Time**

- other written abbreviation: UTC

Fr: Z

zulu

Spoken expression for: **Coordinated Universal Time**

- other spoken expression: universal

Note: This expression is pronounced “ZOO loo.”

Fr: zulu

5.0 Information management

- (1) Not applicable.

6.0 Document history

- (1) Advisory Circular (AC) 100-001 Issue 06, RDIMS 15568572 (E), 15568645 (F), dated 2019-09-26, Glossary for Pilots and Air Traffic Services Personnel;
- (2) Advisory Circular (AC) 100-001 Issue 05, RDIMS 14909829 (E), 14909848 (F), dated 2019-04-05, Glossary for Pilots and Air Traffic Services Personnel;
- (3) Advisory Circular (AC) 100-001 Issue 04, RDIMS 14432101 (E), 14432176 (F), dated 2018-10-11, Glossary for Pilots and Air Traffic Services Personnel;
- (4) Advisory Circular (AC) 100-001 Issue 03, RDIMS 13754043 (E), 13754097 (F), dated 2018-03-09, Glossary for Pilots and Air Traffic Services Personnel;
- (5) Advisory Circular (AC) 100-001 Issue 02, RDIMS 12738622 (E), 12738651 (F), dated 2017-09-17, Glossary for Pilots and Air Traffic Services Personnel; and
- (6) Advisory Circular (AC) 100-001 Issue 01, RDIMS 11396151 (E), 11396146 (F), dated 2016-06-05, Glossary for Pilots and Air Traffic Services Personnel.

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Appendix A—Conversion tables

Table 1—Hectopascals (millibars) to inches of mercury

hPa/mb	0	1	2	3	4	5	6	7	8	9
	Inches									
940	27.76	27.79	27.82	27.85	27.88	27.91	27.94	27.96	27.99	28.02
950	28.05	28.08	28.11	28.14	28.17	28.20	28.23	28.26	28.29	28.32
960	28.35	28.38	28.41	28.44	28.47	28.50	28.53	28.56	28.58	28.61
970	28.64	28.67	28.70	28.73	28.76	28.79	28.82	28.85	28.88	28.91
980	28.94	28.97	29.00	29.03	29.06	29.09	29.12	29.15	29.18	29.20
990	29.23	29.26	29.29	29.32	29.35	29.38	29.41	29.44	29.47	29.50
1000	29.53	29.56	29.59	29.62	29.65	29.68	29.71	29.74	29.77	29.80
1010	29.83	29.85	29.88	29.91	29.94	29.97	30.00	30.03	30.06	30.09
1020	30.12	30.15	30.18	30.21	30.24	30.27	30.30	30.33	30.36	30.39
1030	30.42	30.45	30.47	30.50	30.53	30.56	30.59	30.62	30.65	30.68
1040	30.71	30.74	30.77	30.80	30.83	30.86	30.89	30.92	30.95	30.98
1050	31.01	31.04	31.07	31.09	31.12	31.15	31.18	31.21	31.24	31.27

Note: 1 millibar (mb) = 1 hectopascal (hPa)

Table 2—Temperature: degrees C to degrees F

-45	-49.0	-33	-27.4	-21	-5.8	-9	15.8	3	37.4	15	59.0	27	80.6	39	102.2
-44	-47.2	-32	-25.6	-20	-4.0	-8	17.6	4	39.2	16	60.8	28	82.4	40	104.0
-43	-45.4	-31	-23.8	-19	-2.2	-7	19.4	5	41.0	17	62.6	29	84.2	41	105.8
-42	-43.6	-30	-22.0	-18	-0.4	-6	21.2	6	42.8	18	64.4	30	86.0	42	107.6
-41	-41.8	-29	-20.2	-17	1.4	-5	23.0	7	44.6	19	66.2	31	87.8	43	109.4
-40	-40.0	-28	-18.4	-16	3.2	-4	24.8	8	46.4	20	68.0	32	89.6	44	111.2
-39	-38.2	-27	-16.6	-15	5.0	-3	26.6	9	48.2	21	69.8	33	91.4	45	113.0
-38	-36.4	-26	-14.8	-14	6.8	-2	28.4	10	50.0	22	71.6	34	93.2	46	114.8
-37	-34.6	-25	-13.0	-13	8.6	-1	30.2	11	51.8	23	73.4	35	95.0	47	116.6
-36	-32.8	-24	-11.2	-12	10.4	0	32.0	12	53.6	24	75.2	36	96.8	48	118.4
-35	-31.0	-23	-9.4	-11	12.2	1	33.8	13	55.4	25	77.0	37	98.6	49	120.2
-34	-29.2	-22	-7.6	-10	14.0	2	35.6	14	57.2	26	78.8	38	100.4	50	122.0

Table 3—Conversion factors

To convert	into	multiply by
centimetres	inches	0.394
feet	metres	0.304 8
imperial gallons	U.S. gallons	1.201
imperial gallons	litres	4.546
inches	centimetres	2.540
inches of mercury	pounds per square inch	0.490
kilograms	pounds	2.205
kilograms per litre	pounds per imperial gallon	10.023
kilograms per litre	pounds per U.S. gallon	8.333
kilometres	nautical miles	0.540
kilometres	statute miles	0.621
litres	imperial gallons	0.220
litres	U.S. gallons	0.264
megapascals	pounds per square inch	145.14
metres	feet	3.280 8
nautical miles	kilometres	1.852
nautical miles	statute miles	1.152
newtons	pounds	0.224 8
pounds	kilograms	0.453 592 4
pounds	newtons	4.448 222
pounds per imperial gallon	kilograms per litre	0.099 8
pounds per square inch	inches of mercury	2.040
pounds per square inch	megapascals	0.006 89
pounds per U.S. gallon	kilograms per litre	0.120
statute miles	kilometres	1.609
statute miles	nautical miles	0.868
U.S. gallons	imperial gallons	0.833
U.S. gallons	litres	3.785