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AIP CANADA

Part 3

Aerodromes (AD)

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PART 3 – AERODROMES (AD)
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See Part 1, General (GEN), section GEN 0.1, “Preface.”

AD 0.2 Record of *AIP Canada* Amendments

See Part 1, General (GEN), section GEN 0.2, “Record of *AIP Canada* Amendments.”

AD 0.3 Record of *AIP Canada* Supplements

See Part 1, General (GEN), section GEN 0.3, “Record of *AIP Canada* Supplements.”

AD 0.4 Checklist of *AIP Canada* Pages

See Part 1, General (GEN), section GEN 0.4, “Checklist of *AIP Canada* Pages.”

AD 0.5 List of Hand Amendments to *AIP Canada*

See Part 1, General (GEN), section GEN 0.5, “List of Hand Amendments to *AIP Canada*.”

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AD 1. AERODROMES AND HELIPORTS – INTRODUCTION

AD 1.1 Aerodromes and Heliports – Availability

For the general conditions under which aerodromes, heliports and associated facilities are available for use, and the regulations concerning civil use of military air bases, refer to the following publications:

> *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory"

The International Civil Aviation Organization (ICAO) documents on which the aerodrome and heliport services are based include Annex 14, Volume I, *Aerodrome Design and Operations*, and Volume II, *Heliports*.

For the general conditions under which the low visibility procedures applicable to Category II/III operations at aerodromes are applied, refer to the following publications:

> *Canada Air Pilot*, Volumes 1–7, or *Restricted Canada Air Pilot*

The Canadian Runway Friction Index (CRFI) is used in Canada. For more information refer to the following publication:

> *Canada Flight Supplement*, Section A, "General Section – Runway and/or Heli Data"

Tables 1 and 2 in the above subsection provide details of the application of the CRFI. In Section B, "Aerodrome/Facility Directory," the table for each aerodrome has a subheading RWY DATA (runway data) that contains information on the availability of the CRFI for the runway.

AD 1.2 Rescue and Firefighting Services and Snow Plan

1.2.1 Rescue and Firefighting Services

For information on the rules governing the establishment of rescue and firefighting services at aerodromes and heliports, refer to *Canadian Aviation Regulations* (CARs) Part III, Subpart 3 – Aircraft Rescue and Firefighting at Airports and Aerodromes on Transport Canada's CARs website:

> <http://www.tc.gc.ca/eng/acts-regulations/regulations-sor96-433.htm>
> Part III – Aerodromes and Airports
> Subpart 3 – Aircraft Rescue and Firefighting at Airports and Aerodromes

See also *Canada Flight Supplement*, Section A, "General Section – Services."

1.2.2 Snow Plan

Canada does not publish snow plans. Snow removal is a standard operation in Canada for all aerodrome operators.

AD 1.3 Index to Aerodromes and Heliports

For a list of aerodrome and heliport names, and ICAO location indicators, refer to the following publications:

> *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section A, "General Section – Cross Reference of Aerodrome Location Indicator & Name," and Section B, "Aerodrome/Facility Directory"

For the type of traffic permitted to use the aerodrome or heliport, refer to the following publications:

> *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory”

In Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading REF (reference) that contains reference information, including the type of traffic permitted. If the heading CUST (customs) appears in an aerodrome table, the aerodrome is an airport of entry (AOE) with customs service for international flights.

Further aerodrome and heliport details are listed in AD 2, “Aerodromes,” and AD 3, “Heliports.”

AD 1.4 Grouping of Aerodromes and Heliports

All registered and certified civil aerodromes and military aerodromes within Canada are listed in the *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory.” All registered and certified civil aerodromes and military aerodromes with instrument procedures are listed in the *Canada Air Pilot*, Volumes 1–7, or the *Restricted Canada Air Pilot*.

AD 2. AERODROMES

AD 2.1 Aerodrome Location Indicator and Name

For the ICAO location indicators used for Canadian aerodromes, refer to the following publications:

> *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section A, "General Section – Cross Reference of Aerodrome Location Indicator & Name"

AD 2.2 Aerodrome Geographical and Administrative Data

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for each aerodrome has a subheading REF that contains reference information, including the following geographical and administrative data:

- The aerodrome reference point or the aerodrome geometric centre coordinates, as applicable (geographical coordinates in degrees, minutes and seconds), and its site;
- The direction and distance of the aerodrome reference point or the aerodrome geometric centre coordinates, as applicable, from the centre of the city or town that the aerodrome serves;
- The aerodrome elevation;
- The magnetic variation to the nearest degree (Canada does not currently provide date of information and annual change for magnetic variation); and
- The types of traffic permitted to use the aerodrome (instrument flight rules (IFR) or visual flight rules (VFR) or both).

For reference temperature, refer to the weather office on Environment Canada's website:

> <weatheroffice.ec.gc.ca/canada_e.html>

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for each aerodrome has a subheading OPR (operator) that contains operator information, including the name of the aerodrome's administration and its contact information.

Canada does not currently provide geoid undulation at the aerodrome elevation position.

AD 2.3 Operational Hours

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for each aerodrome contains information on the hours of operation for the services at the aerodrome, if they are provided, under the indicated subheadings:

- For aerodrome administration, refer to the subheading OPR;
- For customs and immigration, refer to the subheading CUST;
- For health and sanitation, refer to the subheading PF (Public Facilities);
- For air traffic services (ATS) reporting office (ARO), refer to the subheading FLT PLN (Flight Planning);
- For the meteorological (MET) briefing office, refer to the subheading FLT PLN;

- For ATS, refer to the subheadings FLT PLN and COMM (communications);
- For fuelling and handling, refer to the subheading SERVICES; and
- For de-icing, refer to the subheading SERVICES; also refer to the *Canada Air Pilot*, Volumes 1–7, or the *Restricted Canada Air Pilot*.

The hours of operation for security can be obtained by contacting the operator of the aerodrome. For contact information, refer to the *Canada Flight Supplement* or the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," under the subheading OPR. The hours of service of the aeronautical information service (AIS) briefing office can be obtained by contacting the AIS head office at NAV CANADA. For contact information, refer to the following publications:

Canada Flight Supplement or *Water Aerodrome Supplement*, Section A, "General Section – Corrections (Civil)"

AD 2.4 Handling Services and Facilities

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for each aerodrome may have a subheading SERVICES that contains a description of the handling services and facilities available at the aerodrome.

AD 2.5 Passenger Facilities

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for each aerodrome may have a subheading PF that contains information on hotels, restaurants, transportation services, and medical facilities at the aerodrome. For information on banking and post office services, and whether there is a tourist office at the aerodrome, contact the operator. For contact information, refer to the subheading OPR.

AD 2.6 Rescue and Firefighting Services

In the *Canada Flight Supplement*, Section B, "Aerodrome/Facility Directory," if the table for an aerodrome has a subheading SERVICES and the aerodrome has rescue and firefighting services and equipment, they will be listed under the ARFF (Aircraft Rescue and Firefighting) entry. If the subheading SERVICES does not appear or does not contain an ARFF entry, then rescue and firefighting services and equipment may not be available at the aerodrome. Contact the aerodrome operator for further information. For contact information, refer to the subheading OPR.

AD 2.7 Seasonal Availability – Clearing

Information on the equipment and operational priorities established for the clearance of aerodrome movement areas is not currently provided by NAV CANADA. This information may be available by contacting the aerodrome operator listed in the *Canada Flight Supplement*, Section B, "Aerodrome/Facility Directory," under the OPR subheading.

AD 2.8 Aprons, Taxiways and Check Locations or Positions Data

With the exception of the differences filed with ICAO by Canada, information related to the physical characteristics of aprons, taxiways and locations or positions of designated checkpoints at aerodromes can be found on the aerodrome sketches in the following publications:

Canada Air Pilot, Volumes 1–7, or the *Restricted Canada Air Pilot*

Canada Flight Supplement, Section B, “Aerodrome/Facility Directory”

Canadian Airport Charts

The latest version of the *Canadian Airport Charts* is available on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Canadian Airport Charts and Designated Airspace Handbook
Canadian Airport Charts
Download current issue

AD 2.9 Surface Movement Guidance and Control System and Markings

For information on the surface movement guidance and control system, and runway and taxiway markings at aerodromes, refer to the aerodrome sketches in the following publications:

Canada Air Pilot, General, and Volumes 1–7, or *Restricted Canada Air Pilot*

Canada Flight Supplement, Section B, “Aerodrome/Facility Directory”

Canadian Airport Charts

The latest version of the *Canadian Airport Charts* is available on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Canadian Airport Charts and Designated Airspace Handbook
Canadian Airport Charts
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AD 2.10 Aerodrome Obstacles

Obstacle data is currently available through the visual flight rules (VFR) chart program, including VFR navigation charts, VFR terminal area charts (VTA), and world aeronautical charts. The provision of obstacle data through the VFR chart program is supplemented by the "VFR Chart Updating Data" subsection in the *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section C, “Planning.”

Additional obstacle data is available by contacting NAV CANADA. Please note that there is a charge to access this data.

NAV CANADA
Customer Relations
151 Slater Street
Suite 120
Ottawa, ON K1P 5H3
Canada

Tel.: 1-800-876-4693-4 (disregard the last digit if in North America)
Fax: +1 613-563-3426
E-mail: service@navcanada.ca

The following information can be provided:

- Obstacle identification;
- Type of obstacle;
- Community;
- Latitude (nearest second);
- Longitude (nearest second);
- Height above sea level (ASL) (nearest foot);
- Height above ground level (AGL) (nearest foot); and
- Status of obstacle lighting and painting.

AD 2.11 Meteorological Information Provided

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading FLT PLN that contains information on the meteorological information provided for the aerodrome.

For more information, including weather radar and satellite images, refer to the Aviation Weather Web Site on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Aviation Weather Services Resources
Flight Planning and Reporting
Pre-Flight Briefings and Flight Plans
Aviation Weather Web Site (AWWS)

AD 2.12 Runway Physical Characteristics

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading RWY DATA that contains runway designations, magnetic bearings (true if in NDA), and dimensions for runways and strips. Strength of pavement of each runway may be available by contacting the aerodrome operator in the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” under the OPR subheading.

Canada Air Pilot, Volumes 1–7, and *Restricted Canada Air Pilot*, provide the following information:

- Runway designations;
- Surface of each runway;
- Elevations of thresholds of non-precision approach (NPA) runways and elevations of thresholds and the highest elevation of the touchdown zone of precision approach runways; and
- Slope of each runway, when available.

Runway threshold coordinates (nearest hundredth of a second) are available by contacting NAV CANADA. Please note that there is a charge to access this data.

Please contact:

NAV CANADA
Customer Relations
151 Slater Street
Suite 120
Ottawa, ON K1P 5H3
Canada

Tel.: 1-800-876-4693-4 (disregard the last digit if in North America)
Fax: +1 613-563-3426
E-mail: service@navcanada.ca

AD 2.13 Declared Distances

For a description of declared distances for each direction of each runway, refer to the following publications:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

AD 2.14 Approach and Runway Lighting

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading LIGHTING that contains a description of approach and runway lighting.

AD 2.15 Other Lighting, Secondary Power Supply

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading LIGHTING that contains a description of other lighting, including the following information:

- Location, characteristics and hours of operation of the aerodrome beacon or identification beacon (if any);
- Location and lighting (if any) of the landing direction indicator; and
- The taxiway edge and taxiway centre line lights.

For information on the secondary power supply, contact the operator of the aerodrome. In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading OPR that contains contact information.

AD 2.16 Helicopter Landing Area

For an indication as to whether the aerodrome has a heliport landing area, refer to the aerodrome sketches in the following publications:

> *Canada Flight Supplement* or *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory”
>
> *Canada Air Pilot*, Volumes 1–7, or *Restricted Canada Air Pilot*

Also in the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” the table for an aerodrome may have a subheading REF that contains the aerodrome’s geographical coordinates, which coincide with the helicopter landing area’s coordinates.

AD 2.17 Air Traffic Services Airspace

For the designation, geographical coordinates, classification and vertical limits of air traffic services (ATS) airspace organized at aerodromes in Canada, see the *Designated Airspace Handbook* (TP 1820E), available on the NAV CANADA website:

> <www.navcanada.ca>
> Aeronautical Information
> Operational Guides
> Canadian Airport Charts and Designated Airspace Handbook
> *Designated Airspace Handbook*
> Download current issue

For the call signs and languages of the ATS units providing service to ATS airspace organized at aerodromes in Canada, see the enroute low altitude, enroute high altitude and terminal area charts (see ENR Figure 3.1.1-1, “Index to Low Altitude Charts” and ENR Figure 3.1.1-2, “Index to High Altitude Charts”).

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” when a visual flight rules (VFR) Terminal Procedures Chart is published for an aerodrome, it contains transition altitudes for the airspace organized at the aerodrome. See also the following publications:

> The appropriate terminal area chart or VFR terminal area chart (VTA)

AD 2.18 Air Traffic Services Communication Facilities

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading COMM that contains information on air traffic services (ATS) communication facilities established at the aerodrome.

AD 2.19 Radio Navigation and Landing Aids

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each aerodrome has a subheading NAV (navigation) that contains information on radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome. See also the following publications:

> *Canada Air Pilot*, Volumes 1–7, or *Restricted Canada Air Pilot*
>
> The appropriate terminal area chart

AD 2.20 Local Traffic Regulations

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for an aerodrome may contain the subheadings PRO (procedures) or CAUTION or both, and these contain information on regulations applicable to the traffic at the aerodrome, including standard routes for taxiing aircraft, parking regulations, training flights, and similar information.

AD 2.21 Noise Abatement Procedures

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for an aerodrome may have a subheading PRO, which may contain information on the noise abatement procedures established at the aerodrome. See also the following publications:

Canada Air Pilot, General, Volumes 1–7 and *Restricted Canada Air Pilot*

AD 2.22 Flight Procedures

In the *Canada Flight Supplement* or the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," when a visual flight rules (VFR) Terminal Procedures Chart is published for an aerodrome, it contains information on conditions and flight procedures, including ATS surveillance procedures, established on the basis of airspace organization at the aerodrome. See also the following publications:

Canada Air Pilot, Volumes 1–7 and *Restricted Canada Air Pilot*

The process documentation concerning the submission of instrument procedures by external instrument procedure design organizations can be found on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Data Submission
External Instrument Procedure Designs
Instrument Procedure Design Submission Overview for Aerodromes

Submissions will be accepted for both public procedures to be published in the CAP and restricted procedures to be published in the RCAP.

2.22.1 Duplicate Approach Procedure Identification

With the increase in instances of published duplicate approach procedures (same approach type to the same runway), changes were made to the Aeronautical Radio Incorporated (ARINC) 424 document to accommodate a duplicate approach procedure suffix in the procedure identifier record of an avionics database. This allows for all duplicate approach procedures to be coded and made available onboard aircraft with suitable avionics equipment.

However, many existing avionics units cannot accept this suffix in their procedure identification records. These units only allow for a four-character approach procedure identifier. For this reason, when duplicate approach procedures are published for an aerodrome, only one of the approach procedures can be coded into the databases of these particular avionics units.

To ensure the appropriate approach procedure is coded into avionics databases in these cases, NAV CANADA has developed and implemented a system for designating the predominant approach procedure. Duplicate approach procedures are differentiated using alpha characters starting with the last letter and generally continuing backward through the alphabet (Z, Y, X, etc.). The predominant approach procedure will be identified using the "Z" suffix (i.e., RNAV (GNSS) Z RWY 25). In some cases the "Y" or "X" alpha character may be omitted and reserved for future procedure development, but it is intended that the approach procedure identified with the "Z" suffix be the one procedure coded in an avionics database when only one duplicate approach procedure can be coded in the system. NAV CANADA assigns the "Z" suffix in accordance with the following priority:

1. Approach procedure intended for all/most customers vs. some customers.
2. Public approach procedure vs. restricted approach procedure.
3. Lower minima vs. higher minima.

Circling-only procedures are designated in Canada using alpha characters starting with the first letter of the alphabet (A, B, C, etc.). If similar database limitations exist with respect to circling-only procedures at the same aerodrome (i.e., NDB A, NDB B), the predominant approach procedure will be the procedure that has the first letter within the sequence (i.e., "A" predominant over "B").

When an avionics database can accommodate duplicate approach procedures, all instrument procedures provided by NAV CANADA will be inserted into the database.

2.22.2 Management of Avionics Databases: Limited Storage Capability

To ensure the suitability of the available instrument procedures in general avionics databases that have limited storage capability, database providers shall only reduce the database inventory of available procedures on a whole aerodrome basis. When eliminating instrument procedures from a general avionics database for limited storage capacity reasons, all procedures existing for a given aerodrome (or aerodromes) must be removed. A general avionics database shall never contain only some of the instrument procedures for a specific aerodrome in Canada, unless this is necessary for reasons related to duplicate approach procedure identification. This practice may be applied in a larger scale by removing all procedures from all aerodromes within a specified area, region, or province.

Customized databases may continue to be compiled as requested by the customer for whom the custom database is intended. The rules described above pertaining to general avionics databases are not intended to be applicable to customized avionics databases.

Database coding providers and avionics manufacturers with questions or suggestions can contact NAV CANADA AIM Development at <ncrga_ais_standards&@navcanada.ca>.

2.22.3 Required Navigation Performance Authorization Required

Special authorization from Transport Canada is required to conduct required navigation performance (RNP) authorization required (AR) approaches in Canada. For more information, refer to Transport Canada Advisory Circular 700-024.

2.22.3.1 RNP Value

RNP AR approaches are designed in Canada using standard RNP values for each segment. These standard RNP values are shown in Table 2.22.3.

Table 2.22.3, Standard RNP Values

Segment	Standard RNP Value
Feeder / Transition	2.00
Initial	1.00
Intermediate	1.00
Final	0.30
Missed Approach	1.00

When circumstances require (i.e. obstacle environment, operational requirements, etc.) an RNP value other than the standard value may apply within the feeder / transition, initial or intermediate segment. In these cases, the RNP value is charted at the waypoint where the non-standard RNP value commences. The non-standard RNP value then continues until another non-standard value is specified or until a subsequent segment's standard RNP value is equal to or less than the previous segment's non-standard value.

Multiple RNP values may exist for the final segment and are represented with their applicable decision altitude (DA) in the approach minima section of the chart. Only the largest RNP value will be coded into the avionics database however pilots will have the ability to enter the lower values if their equipment permits.

When the missed approach segment requires an RNP value less than 1.00, the missed approach instruction includes the statement, "Missed approach requires RNP less than 1.00".

2.22.3.2 Use of Multiple Intermediate Fixes

In certain situations, RNP AR approach procedures will be designed with multiple intermediate fixes (IF). These waypoints will be identified on the approach chart as intermediate approach waypoints (IWP). In these cases, the profile view will only show the flight track from the first common waypoint to the missed approach waypoint (MAWP) and into the missed approach. Intermediate segment information will not be provided in the profile view but instead can be obtained from the plan view of the approach chart.

2.22.3.3 Validation of the Navigation Database for RNP AR Approaches

Validation of the navigation database for Canadian RNP AR approaches can be accomplished by referencing the data published in the *AIRAC Canada* document. *AIRAC Canada* can be obtained by contacting AIRAC@navcanada.ca. See section GEN 3.1.4, "AIRAC System."

In addition to this, an arrangement to receive procedure data through a licencing agreement can be made by contacting NAV CANADA Customer and Commercial Services, service@navcanada.ca.

2.22.4 High Intensity Approach Lights (HIAL) Inoperative

Instrument approach procedures developed for runways with HIAL systems receive a credit against their advisory visibility (by up to ½ statute mile [SM]). When these lighting systems are inoperative, adjustments to the approach minima must be made by the pilot as indicated in the tables below. This includes cases when the HIAL system is continuously operating on only one of the normally available intensity levels and changes to the intensity cannot be selected or requested by the pilot during the approach. These approach minima adjustments may determine whether or not the pilot is prohibited from completing an instrument approach past the final approach fix (FAF).

HIAL systems in Canada include the following: SSALR (AN), ALSF-2 (AL), SSALS (AW), CAT I High Intensity (AE) (also known as ALSF-1) and CAT II High Intensity (AC). All of these systems, except for SSALS, are used to certify a precision approach runway. Refer to the *Canada Flight Supplement* (CFS), Section A, "General – Lighting" section for more information on aerodrome lighting.

When the HIAL system is inoperative, a certified precision runway will be downgraded to a non-precision runway. For this reason, an approach procedure with straight-in minima below a decision height (DH) of 250 feet, and below an advisory visibility of 1 SM (RVR 50), must have its minima increased to 250 feet DH and 1 SM (RVR 50) visibility when the HIAL is inoperative. For example:

Table2.22.4-1, Straight-in Minima Corrections for a Decision Height Below 250 Feet

HIAL Operational (published)		HIAL Inoperative	
DH (ft)	**Advisory Visibility (SM)**	**DH (ft)**	**Advisory Visibility (SM)**
200 – 249	½ (RVR 26)	250	1 (RVR 50)

For approach procedures with straight-in minima of 250 feet DH / HAT (height above touchdown zone elevation) or greater, the advisory visibility must be increased if any of the HIAL systems become inoperative, as indicated in the following table. No increase to the DH / HAT itself is required.

Table 2.22.4-2, Advisory Visibility Corrections for a DH/HAT Equal to or Greater than 250 Feet

DH/HAT (ft)	Advisory Visibility when HIAL is Operational (published) (SM)	Advisory Visibility when HIAL is Inoperative (SM)
250 – 347	1	1
348 – 434	1	1¼
435 – 521	1	1½
522 – 608	1¼	1¾
609 – 695	1½	2
696 – 782	1¾	2¼
783 – 869	2	2½
870 – 956	2¼	2¾
957 and above	2½	3

For circling minima, no adjustment is required based on the operating condition of the HIAL systems.

AD 2.23 Additional Information

In the *Canada Flight Supplement* and the *Water Aerodrome Supplement*, Section B, "Aerodrome/Facility Directory," the table for an aerodrome may contain the subheadings PRO or CAUTION or both, and these may contain additional information on the aerodrome.

AD 2.24 Charts Related to an Aerodrome

Canada Air Pilot, Volumes 1–7, and *Restricted Canada Air Pilot*, contain the following types of charts:

- Aerodrome and heliport charts,
- Aircraft parking and docking charts,
- Aerodrome taxi charts,
- Standard departure charts – instrument,
- Standard arrival charts – instrument,
- Instrument approach charts, and
- Visual approach charts.

Aerodrome obstacle charts (ICAO Type A) can be obtained by contacting the Aeronautical Publications Sales and Distribution Unit of NAV CANADA. For contact information, refer to GEN 3.2.3, “Purchase Arrangements.”

For area charts with departure and transit routes, and area charts with arrival and transit routes, refer to the following publications:

> The appropriate enroute low altitude, enroute high altitude and terminal area charts (see ENR Figure 3.1.1-1, “Index to Low Altitude Charts” and ENR Figure 3.1.1-2, “Index to High Altitude Charts”)

Canada does not currently provide precision approach terrain charts or minimum vectoring altitude charts.

For information on bird concentrations in the vicinity of aerodromes, refer to ENR 5.6, “Bird Migration and Areas with Sensitive Fauna.” This information can also be obtained from the aerodrome automatic terminal information service (ATIS). If the aerodrome has ATIS, it will be listed in the *Canada Flight Supplement* or the *Water Aerodrome Supplement*, Section B, “Aerodrome/Facility Directory,” table for the aerodrome under the subheading COMM.

AD 3. HELIPORTS

AD 3.1 Heliport Location Indicator and Name

For the ICAO location indicators used for Canadian aerodromes, refer to the following publication:

> *Canada Flight Supplement*, Section A, "General Section – Cross Reference of Heliport Names" and "Cross Reference of Aerodrome Location Indicator & Name"

AD 3.2 Heliport Geographical and Administrative Data

In the *Canada Flight Supplement*, Section B, "Aerodrome/Facility Directory," the table for each heliport has a subheading REF that contains reference information, including the following geographical and administrative data:

- The heliport reference point (equivalent to aerodrome reference point) or the aerodrome geometric centre coordinates, as applicable (geographical coordinates in degrees, minutes and seconds), and its site;
- The direction and distance of the heliport reference point (equivalent to aerodrome reference point) or the aerodrome geometric centre coordinates, as applicable, from the centre of the city or town that the heliport serves;
- The heliport elevation;
- The magnetic variation to the nearest degree (Canada does not currently provide date of information and annual change for magnetic variation); and
- The types of traffic permitted to use the heliport (instrument flight rules [IFR] or visual flight rules [VFR] or both).

For reference temperature, refer to the weather office on Environment Canada's website:

> <weatheroffice.ec.gc.ca/canada_e.html>

In the *Canada Flight Supplement*, Section B, "Aerodrome/Facility Directory," the table for each heliport has a subheading OPR that contains operations information, including the name of the heliport's administration and its contact information.

Canada does not currently provide geoid undulation at the heliport elevation position.

AD 3.3 Operational Hours

In the *Canada Flight Supplement*, Section B, "Aerodrome/Facility Directory," the table for each heliport contains information on the hours of operation for the services at the heliport, if they are provided, under the indicated subheadings:

- For the heliport administration, refer to the subheading OPR;
- For customs and immigration, refer to the subheading CUST;
- For health and sanitation, refer to the subheading PF;
- For the ARO, refer to the subheading FLT PLN;
- For the MET briefing office, refer to the subheading FLT PLN;

- For air traffic services (ATS), refer to the subheadings FLT PLN and COMM;
- For fuelling and handling, refer to the subheading SERVICES; and
- For de-icing, refer to the subheading SERVICES; also refer to the *Canada Air Pilot*, Volumes 1–7, or the *Restricted Canada Air Pilot*.

The hours of operation for security can be obtained by contacting the operator of the heliport. For contact information, refer to the *Canada Flight Supplement*, Section B, “Aerodrome/Facilities Directory,” under the subheading OPR. The hours of service of the AIS briefing office can be obtained by contacting the AIS head office at NAV CANADA. For contact information, refer to the following publication:

Canada Flight Supplement, Section A, “General Section – Corrections (Civil)”

AD 3.4 Handling Services and Facilities

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport may have a subheading SERVICES that contains a description of the handling services and facilities available at the heliport.

AD 3.5 Passenger Facilities

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport may have a subheading PF (public facilities) that contains information on hotels, restaurants, transportation services, and medical facilities at the heliport. For information on banking and post office services, and whether there is a tourist office at the heliport, contact the operator. For contact information, refer to the subheading OPR.

AD 3.6 Rescue and Firefighting Services

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” if the table for a heliport has a subheading SERVICES and the heliport has rescue and firefighting services and equipment, they will be listed under the ARFF entry. If the subheading SERVICES does not appear or does not contain an ARFF entry, then rescue and firefighting services and equipment may not be available at the heliport. Contact the heliport operator for further information. For contact information, refer to the subheading OPR.

AD 3.7 Seasonal Availability – Clearing

Information on the equipment and operational priorities established for the clearance of heliport movement areas is not currently provided by NAV CANADA. This information may be available by contacting the aerodrome operator in the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” under the subheading OPR).

AD 3.8 Aprons, Taxiways and Check Locations or Positions Data

With the exception of the differences filed with ICAO by Canada, information related to the physical characteristics of aprons, taxiways and locations or positions of designated checkpoints at heliports can be found on the aerodrome sketches in the following publications:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

Canadian Airport Charts

The latest version of the *Canadian Airport Charts* is available in PDF on NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Canadian Airport Charts and Designated Airspace Handbook
Canadian Airport Charts
Download current issue

AD 3.9 Markings and Markers

Refer to the aerodrome sketches in the following publications:

Canada Flight Supplement, Section B, “Aerodrome/Facility Directory”

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

Canadian Airport Charts

The latest version of the *Canadian Airport Charts* is available in PDF on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Canadian Airport Charts and Designated Airspace Handbook
Canadian Airport Charts
Download current issue

AD 3.10 Heliport Obstacles

Obstacle data is currently available through the visual flight rules (VFR) chart program, including VFR navigation charts, VFR terminal area charts (VTA), and world aeronautical charts. The provision of obstacle data through the VFR chart program is supplemented by the "VFR Chart Updating Data" subsection in the *Canada Flight Supplement or Water Aerodrome Supplement*, Section C, “Planning.”

Additional obstacle data is available by contacting NAV CANADA. Please note that there is a charge to access this data.

Please contact:

NAV CANADA
Customer Relations
151 Slater Street
Suite 120
Ottawa, ON K1P 5H3
Canada

Tel.: 1-800-876-4693-4 (disregard the last digit if in North America)
Fax: +1 613-563-3426
E-mail: service@navcanada.ca

The following information can be provided:

- Obstacle identification;
- Type of obstacle;
- Community;
- Latitude (nearest second);
- Longitude (nearest second);
- Height above sea level (ASL) (nearest foot);
- Height above ground level (AGL) (nearest foot); and
- Status of obstacle lighting and painting.

AD 3.11 Meteorological Information Provided

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading FLT PLN that contains information on the meteorological information provided for the heliport.

For more information, including weather radar and satellite images, refer to the Aviation Weather Web Site on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Aviation Weather Services Resources
Flight Planning and Reporting
Pre-Flight Briefings and Flight Plans
Aviation Weather Web Site (AWWS)

AD 3.12 Heliport Data

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport contains information on the heliport dimensions and related information, under the indicated subheadings:

- For the heliport type, whether it is surface-level, elevated or a helideck, refer to the subheading REF;
- For the dimensions and surface of the touchdown and liftoff (TLOF) area, refer to the subheading PAD DATA; and
- For the dimensions of the safety area, refer to the subheading PAD DATA.

Canada Air Pilot, Volumes 1–7, and *Restricted Canada Air Pilot*, provide the following information:

- Geographical coordinates and the slope and elevation of the TLOF or the final approach and takeoff (FATO) area or both (Canada does not provide geoid undulation); and
- Dimensions of helicopter clearway and the existence of an obstacle-free zone.

For the magnetic bearings (true if in NDA) and dimensions of the FATO area, refer to the aerodrome sketches in the following publications:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

Canada Flight Supplement, Section B, “Aerodrome/Facility Directory”

AD 3.13 Declared Distances

For a description of declared distances, where relevant for a heliport, refer to the following publication:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

AD 3.14 Approach and FATO Lighting

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading LIGHTING that contains a description of approach and FATO lighting.

AD 3.15 Other Lighting, Secondary Power Supply

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading LIGHTING that contains a description of other lighting, including the following information:

- Location, characteristics and hours of operation of the heliport beacon;
- Location and lighting of the wind direction indicator (WDI); and
- The taxiway edge and taxiway centre line lights.

For information on the secondary power supply, contact the operator of the heliport. In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading OPR that contains contact information.

AD 3.16 Air Traffic Services Airspace

For the designation, geographical coordinates, classification and vertical limits of air traffic services (ATS) airspace organized at heliports in Canada, see the *Designated Airspace Handbook* (TP 1820E), available on the following website:

<www.navcanada.ca>
Aeronautical Information
Operational Guides
Canadian Airport Charts and Designated Airspace Handbook
Designated Airspace Handbook
Download current issue

For the call signs and languages of the ATS units providing service to ATS airspace organized at heliports in Canada, see the enroute low altitude, enroute high altitude and terminal area charts (see ENR Figure 3.1.1-1, “Index to Low Altitude Charts” and ENR Figure 3.1.1-2, “Index to High Altitude Charts”).

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” when a visual flight rules (VFR) Terminal Procedures Chart is published for a heliport, it contains transition altitudes for the airspace organized at the heliport. See also the appropriate terminal area chart or VFR terminal area chart (VTA).

AD 3.17 Air Traffic Services Communication Facilities

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading COMM that contains information on air traffic services (ATS) communication facilities established at the heliport.

AD 3.18 Radio Navigation and Landing Aids

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for each heliport has a subheading NAV that contains information on radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the heliport. See also the following publications:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

The appropriate terminal area chart

AD 3.19 Local Traffic Regulations

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for a heliport may contain the subheadings PRO or CAUTION or both, and these contain information on regulations applicable to the traffic at the heliport, including standard routes for taxiing helicopters, parking regulations, training flights and similar information.

AD 3.20 Noise Abatement Procedures

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for a heliport may have a subheading PRO, which may contain information on the noise abatement procedures established at the heliport. See also the following publications:

Canada Air Pilot, General, Volumes 1–7, or *Restricted Canada Air Pilot*

AD 3.21 Flight Procedures

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” when a visual flight rules (VFR) Terminal Procedures Chart is published for a heliport, it contains information on conditions and flight procedures, including ATS surveillance procedures, established on the basis of airspace organization at the heliport. See also the following publications:

Canada Air Pilot, Volumes 1–7, or *Restricted Canada Air Pilot*

The process documentation concerning the submission of instrument procedures by external instrument procedure design organizations can be found on the NAV CANADA website:

<www.navcanada.ca>
Aeronautical Information
Data Submission
External Instrument Procedure Designs
Instrument Procedure Design Submission Overview for Aerodromes

Submissions will be accepted for both public procedures to be published in the CAP and restricted procedures to be published in the RCAP.

3.21.1 Duplicate Approach Procedure Identification

With the increase in instances of published duplicate approach procedures (same approach type to the same runway), changes were made to the ARINC 424 document to accommodate a duplicate approach procedure suffix in the procedure identifier record of an avionics database. This allows for all duplicate approach procedures to be coded and made available onboard aircraft with suitable avionics equipment.

However, many existing avionics units cannot accept this suffix in their procedure identification records. These units only allow for a four-character approach procedure identifier. For this reason, when duplicate approach procedures are published for an aerodrome, only one of the approach procedures can be coded into the databases of these particular avionics units.

To ensure the appropriate approach procedure is coded into avionics databases in these cases, NAV CANADA has developed and implemented a system for designating the predominant approach procedure. Duplicate approach procedures are differentiated using alpha characters starting with the last letter and generally continuing backward through the alphabet (Z, Y, X, etc.). The predominant approach procedure will be identified using the “Z” suffix (i.e., RNAV (GNSS) Z RWY 25). In some cases the “Y” or “X” alpha character may be omitted and reserved for future procedure development, but it is intended that the approach procedure identified with the “Z” suffix be the one procedure coded in an avionics database when only one duplicate approach procedure can be coded in the system. NAV CANADA assigns the “Z” suffix in accordance with the following priority:

1. Approach procedure intended for all/most customers vs. some customers.
2. Public approach procedure vs. restricted approach procedure.
3. Lower minima vs. higher minima.

Circling-only procedures are designated in Canada using alpha characters starting with the first letter of the alphabet (A, B, C, etc.). If similar database limitations exist with respect to circling-only procedures at the same aerodrome (i.e., NDB A, NDB B), the predominant approach procedure will be the procedure that has the first letter within the sequence (i.e., “A” predominant over “B”).

When an avionics database can accommodate duplicate approach procedures, all instrument procedures provided by NAV CANADA will be inserted into the database.

3.21.2 Management of Avionics Databases: Limited Storage Capability

To ensure the suitability of the available instrument procedures in general avionics databases that have limited storage capability, database providers shall only reduce the database inventory of available procedures on a whole aerodrome basis. When eliminating instrument procedures from a general avionics database for limited storage capacity reasons, all procedures existing for a given aerodrome (or aerodromes) must be removed. A general avionics database shall never contain only some of the instrument procedures for a specific aerodrome in Canada, unless this is necessary for reasons related to duplicate approach procedure identification. This practice may be applied in a larger scale by removing all procedures from all aerodromes within a specified area, region, or province.

Customized databases may continue to be compiled as requested by the customer for whom the custom database is intended. The rules described above pertaining to general avionics databases are not intended to be applicable to customized avionics databases.

Database coding providers and avionics manufacturers with questions or suggestions can contact NAV CANADA AIM Development at <ncrga_ais_standards&@navcanada.ca>.

AD 3.22 Additional Information

In the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” the table for a heliport may contain the subheadings PRO or CAUTION or both, and these may contain additional information on the heliport.

AD 3.23 Charts Related to a Heliport

Canada Air Pilot, Volumes 1–7, and *Restricted Canada Air Pilot* contain the following types of charts:

- Aerodrome and heliport charts,
- Aircraft parking and docking charts,
- Aerodrome taxi charts,
- Standard departure charts – instrument,
- Standard arrival charts – instrument,
- Instrument approach charts, and
- Visual approach charts.

For area charts with departure and transit routes, and area charts with arrival and transit routes, refer to the following publications:

> The appropriate enroute low altitude, enroute high altitude and terminal area charts (see ENR Figure 3.1.1-1, “Index to Low Altitude Charts” and ENR Figure 3.1.1-2, “Index to High Altitude Charts”)

Canada does not currently provide minimum vectoring altitude charts.

For information on bird concentrations in the vicinity of heliports, refer to ENR 5.6, “Bird Migration and Areas with Sensitive Fauna.” This information can also be obtained from the automatic terminal information service (ATIS). If the heliport has ATIS, it will be listed in the *Canada Flight Supplement*, Section B, “Aerodrome/Facility Directory,” table for the heliport under the subheading COMM.