



Advisory Circular

Subject: Restricted Instrument Procedures

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1.0 INTRODUCTION

- (1) This Advisory Circular (AC) is provided for information and guidance purposes. It may describe 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 guidance on how to publish or submit for publishing a Restricted Instrument Procedure (RIP) in the *Restricted Canada Air Pilot* (RCAP).

1.2 Applicability

- (1) This document is applicable to all Transport Canada Civil Aviation (TCCA) employees and to individuals or 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 informational purposes.

1.3 Description of Changes

- (1) Due to the number of changes incorporated into this Issue, readers should review the content of the entire document. The major changes are:
 - (a) The use of a minima that requires a missed approach climb gradient up to 425 feet/NM (600 feet/NM for helicopter-only procedures), is no longer one of the grounds for the publication of a RIP;
 - (b) Instrument approach procedures (IAP) with a missed approach climb gradient in excess of 425 feet/NM (600 feet/NM for helicopter only-procedures) requires Flight Standards approval;
 - (c) Charting requirements have been amended; and
 - (d) The maximum interval for periodic reviews, has been changed.

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., 1985, c. A-2);
 - (b) *Civil Air Navigation Services Commercialization Act* (1996, c. 20);
 - (c) Part VIII, Subpart 03 of the Canadian Aviation Regulations (CARs) — *Aeronautical Information Services*;
 - (d) Civil Aviation Directive (CAD) REG-003, Issue 01, 2009-10-01— *Exemptions from Regulatory Requirement*;
 - (e) Advisory Circular (AC) 301-001, Issues 01, 2008-10-01 — *Procedures to be followed in order to support Instrument Approach Procedures (IAP) at a non- certified aerodrome*;

- (f) Canadian NOTAM Procedures Manual, version 16.4, 2016-04-31; and
- (g) Transport Canada Publication (TP) 308/GPH 209 — *Criteria for the Development of Instrument Procedures*, Change 7.1, 2018-01-01.

2.2 Cancelled Documents

- (1) By default, it is understood that the publication of a new issue of a document automatically renders any earlier issues of the same document null and void.

2.3 Definitions, Acronyms and Abbreviations

- (1) The following **definitions, acronyms** and **abbreviations** are used in this document:
 - (a) **AIRAC:** Aeronautical Information Regulation and Control;
 - (b) **Alternate Standards or Criteria:** design standards or criteria to be used instead of TP308/GPH209; **Deviation:** a variation from the standards and criteria contained in TP308/GPH209;
 - (c) **Deviation Approval:** a type of formal approval that supports a deviation to TP308/GPH209;
 - (d) **Exemption:** an executive decision pursuant to subsection 5.9(2) of the Aeronautics Act. An exemption entitles a person to act outside the normal regulatory requirements;
 - (e) **Instrument Procedure Design Organization:** an individual or organization that develops instrument procedures (IPs) on behalf of a sponsor;
 - (f) **Non-Standard Instrument Procedure:** an instrument procedure that is, in part or as a whole, not compliant with TP308/GPH209;
 - (g) **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;
 - (h) **Operator:** an “air operator” or a “private operator” as defined in CAR 101.01;
 - (i) **Restricted Canada Air Pilot (RCAP):** the Canadian aeronautical publication containing RIPs; and
 - (j) **Restricted Instrument Procedure (RIP):** an instrument approach, departure, arrival or transition procedure that has been approved by TCCA for restricted use by one or more operators and/or the military.

3.0 BACKGROUND

3.1 General

- (1) Some circumstances prevent certain instrument procedures from being published in the Canada Air Pilot (CAP). These procedures are referred to as “Restricted Instrument Procedures” and require specific approval for use.
- (2) Restricted Instrument Procedures (RIPs) are dependent on the ability of the operator to meet certain requirements which may include, but are not limited to, aircraft performance, aircraft equipment, airport facility, crew training, etc. Due to their special nature, RIPs are published in the Restricted Canada Air Pilot (RCAP). Use of the procedures in the RCAP requires a specific approval and compliance with all associated conditions.

3.2 Sponsor

- (1) A “sponsor” is deemed to be an individual or organization that has agreed to assume the regulatory responsibility for an Instrument Procedure (IP) at an aerodrome or operational location. This responsibility involves the initial design, verification, flight check and maintenance of the IP, including the periodic review. Sponsors may be air, private or aerodrome operators, or other organizations. In cases where multiple operators have a requirement for an IP, one of these operators must agree to be the sponsor.

3.3 Deviations and Exemptions

- (1) With the promulgation of the CARs on October 10, 1996, TP 308/GPH 209 was incorporated by reference in Section 803.02 of the CARs.
- (2) Development and publication of IPs, and the ability to authorize deviations for non-compliant IPs remains in TP 308/GPH 209, Volume 1, Chapter 1, Non-Standard Procedures.
- (3) The use of alternate IP design standards or criteria to those published in TP 308/GPH 209 is outside the regulatory requirements and requires an exemption to Section 803.02 of the CARs.

3.4 Policies and Procedures Change

- (1) Non-Standard IPs require the approval of TCCA and, if granted, should be published as a RIP.
- (2) The periodic review of RIPs must have a cycle of no greater than five (5) years.
- (3) Unless stated otherwise in TP 308/GPH 209, deviations from the approved standards will be based on TP 308/GPH 209, Volume 1, Chapter 1, Non-Standard Procedures and approved through an exemption or a “Deviation Approval” letter.
- (4) The “Deviation Approval” letter is used to officially document a non-compliance with TP 308/GPH 209. When a procedure is amended or reviewed, reprocessing of an existing deviation is not necessary unless the reason for the amendment directly impacts the basis for the original deviation approval in which case a new deviation request is required.
- (5) Deviation or exemption approval will only be issued if the IP is in the public interest and not likely to affect aviation safety.
- (6) When a sponsor is seeking the approval of a Non-Standard IP, a criteria compliant IP should be available for the same site. If a compliant IP is not already available, one should be developed and published in conjunction with the Non-Standard IP. If a criteria compliant IP is not already available and one is not developed and published in conjunction with the Non-Standard IP, the reason(s) for not developing a criteria compliant procedure must be clearly justified.
- (7) The publication of an IAP that requires a missed approach climb gradient in excess of 425 feet/NM (600 feet/NM for helicopter-only procedures), requires Flight Standards approval and must be published as a RIP.

Note: Operations with a minima that requires a climb gradient in excess of 425 feet/NM (600 feet/NM for helicopter-only procedures) requires a specific approval.

- (8) Applications for approval of Non-Standard IPs are to be submitted to TCCA, Chief Air Navigation Services (ANS) Operations Oversight:

Transport Canada Civil Aviation

ANS Operations Oversight (AARON)

330 Sparks Street

Ottawa (Ontario) K1A 0N8

4.0 REQUIREMENTS

4.1 Non-Standard Instrument Procedures

- (1) Subsection 803.02(a) of the CARs states that “No person shall publish or submit for publishing in the Canada Air Pilot an IP unless the procedure has been developed in accordance with the standards and criteria specified in the manual entitled *Criteria for the Development of Instrument Procedures*.”
- (2) TP 308 states that “Every effort shall be made to formulate procedures in accordance with these standards and criteria; however, peculiarities of terrain, navigation information, obstacles, etc... may require special consideration.”
- (3) Non-Standard IPs will be considered ONLY when there is no other suitable means to resolve a procedural problem, or to provide a required service. Provided that an application is fully documented and that an equivalent level of safety exists, TCCA may approve a Non-Standard IP, if it is justified and in the public interest.
- (4) Non-Standard IPs have to be supported by an exemption or Deviation Approval letter.
- (5) All applications for a non-criteria compliant IP must be accompanied by an analysis of the operational benefits to be gained from publishing of the IP. When TCCA processes the application, a review of the operational advantage will be conducted to ensure that it is sufficient to justify the authorization of a Non-Standard IP.
- (6) Items identified in TP 308/GPH 209 that require Flight Standards approval (GP angle less than 3.00 degrees, etc..) are not to be interpreted as a requirement for a deviation and do not require a Deviation Approval. A request of this type is made in plain text by letter to TCCA, Chief of Flight Standards (AARTA).

4.2 Grounds for the Publication of a Restricted Instrument Procedure

- (1) The reasons for restricting an IP are as follows:
 - (a) The IP is not compliant with TP 308/GPH 209 design standards and/or criteria, but is developed to meet operational requirements and requires an exemption or Deviation Approval;
 - (b) The IP has a “Restricted” application in accordance with TP308/GPH209 (i.e., aerodrome design limitation, restricted helicopter departure procedure); and
 - (c) The IAP requires a missed approach climb gradient in excess of 425 feet/NM (600 feet/NM for helicopter-only procedures).

4.3 Submission for Exemption

- (1) Each IP that requires an exemption from Subsection 803.02 (a) of the CARs shall be submitted to TCCA for approval. The requirements for submission to TCCA are outlined in TCCA document Civil Aviation Directive (CAD) No. REG-003 -- *Exemptions from Regulatory Requirements* available at the following hyperlink:

www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-reg-reg-003-1019.htm

4.4 Submission for Deviation Approval

- (1) All submissions must be accompanied by the complete design package/file and shall contain the following information:
 - (a) Aerodrome/Heliport: name and location of the site (i.e., Regina/ Sumspot, SK);
 - (b) Justification: an explanation of why the requested procedure cannot be developed to meet published standards and criteria and why the proposed deviation should be authorized;
 - (c) Means of Providing an Equivalent Level of Safety: all means of providing an equivalent level of safety must be documented. Means such as restricting the procedure to specific aircraft types or performance, special aircrew training requirements and/or special notes or briefings may be considered;
 - (d) Procedure: name of the IP (i.e., LOC RWY 15); and
 - (e) Standard(s) and/or Criteria Affected: indicate the specific paragraph(s) of the standards and criteria, by number and title, that is (are) not complied with in the proposed procedure design (i.e., TP 308/GPH 209, Volume 1, paragraph 216 Controlling Obstacle(s)).

Note: The design package/file is comprised of computation forms, submission forms and drawings (maps). These forms and drawings, document the elements and calculation processes that establish the IP.

4.5 Sponsor Responsibility

- (1) There may be locations where development of an IP is desirable for a specific commercial purpose that does not meet the NAV CANADA's Level of Service Policy. If a sponsor determines that the requirement for development and publication of an IP is justified, the sponsor must engage the services of an IP design organization to develop and maintain the IP on their behalf. The sponsor responsibilities include:
 - (a) ensuring the IP is developed in accordance with Part VIII of the CARs;
 - (b) ensuring that the IP has been designed in accordance with any policies concerning wildlife, environment, noise or any other applicable criteria;
 - (c) having a maintenance plan in place for the published IP. This includes an obstacle evaluation plan in place to assess the impact that proposed or newly constructed obstacles will have on the published IPs;
 - (d) developing a NOTAM plan indicating the Flight Information Centre contact information required to produce a NOTAM for the procedure; and
 - (e) when a RIP is not maintained by NAV CANADA, notifying NAV CANADA if procedure maintenance responsibilities can no longer be met. The procedure must be suspended until such time maintenance has been restored and the procedure has been re-evaluated to ensure currency. If maintenance cannot be restored within 60 days, the procedure must be revoked.
- (2) Sponsors must ensure on an ongoing basis that the conditions outlined in TP308/GPH209, Volume 1, Chapter 1, Para 131 are respected. A record of change for the IP design must be kept in the IP design package of documents. These changes must include signatures (Sponsor, Designer, Independent reviewer, and flight check pilot) if any of these conditions (outlined above) cause the procedure to be changed.

4.6 Aerodrome Status

- (1) TP308/GPH209, Volume 1, Chapter 1, Table 1-1, specifies the type of IP and the associated minima and application (public or restricted use) authorized for any combination of navigation aid/approach system capability versus the landing surface and applicable aerodrome design requirements. The rationale for linking the aerodrome standards and approach minima is to ensure that a specific obstacle-free environment is provided in the vicinity of the aerodrome to support the visual segment of the IP.
- (2) Aerodromes hosting RIPs must be registered and have a NOTAM File.

4.7 Aerodrome Operator Attestation

- (1) When required, it is the aerodrome operator's responsibility to ensure that an assessment of the runway is conducted and that the results are provided to the IP designer. The procedure to be followed in order to support an Instrument Approach Procedure (IAP) at a non-certified aerodrome are outlined in AC No. 301-001 available at the following hyperlink:
www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-ac300-301-001-119.htm
- (2) The procedure designer shall confirm that the assessment results match the information in the Aerodrome Physical Characteristics table. Should any part of the Aerodrome Operator Attestation or assessment results be incomplete, the procedure designer shall return the package to the aerodrome operator.
- (3) If the aerodrome operator fails to provide results that are satisfactory to the IP designer, the designer may choose not to develop an IP for the site; or develop a RIP as per TP 308/GPH 209, Volume 1, Chapter 1, Table 1-1 (No Aerodrome Status) with minima no lower than 500 feet HAA/HAT.

4.8 Charting Requirements

- (1) When required, RIP conditions should be published on a second page attached to the approach chart.
- (2) Procedures that require an exemption, Deviation Approval, or missed approach climb gradient as specified in paragraph 3.4 (7) have unique conditions. TCCA provides NAV CANADA with the conditions to be published on the second page.
- (3) For an IAP with no aerodrome status, the following information should be published on the second page:
 - (a) **RESTRICTED INSTRUMENT PROCEDURE**
Aerodrome visual surfaces not assessed (Obstacle Limitation Surfaces not assessed)
When starting the descent from the landing minima, pilots are cautioned that a specific obstacle-free environment is not provided on this IFR procedure. The following provisions are attached to this RIP:
 - Flight Crew must be familiar with the aerodrome environment, including local area obstacles, terrain, and aerodrome layout;
 - The required visual references to descend below MDA/DA, should include the obstacle(s) and terrain in the approach area of the runway; and
 - All visual references required by the pilot in order to continue the approach to a safe landing should be distinctly visible and identifiable to the pilot.

4.9 Periodic Review

- (1) TP308 states that “All procedures shall be subjected to a periodic review. The maximum interval for this review is five years.”
- (2) The date of the flight check marks the beginning of this maximum interval for new and re-establish instrument procedures. Existing procedures will use the periodic review completion date to mark the beginning of this maximum interval.
- (3) All RIPs published in the RCAP carry a “Regulatory Review Date” on the procedure chart. The Regulatory Review Date serves as a due date for periodic review and will coincide with the 56 day AIRAC schedule..
- (4) The periodic review must be completed prior to the Regulatory Review Date. If the review cannot be completed before this date, the sponsor is responsible to suspend the IP by NOTAM (“NOT AUTH”) until the review has been completed. If a NOTAM is not issued by the sponsor, NAV CANADA will remove the RIP from the RCAP and issue a NOTAM. See paragraph 4.5 (1) (e).
- (5) Upon completion of the periodic review, determine a new RRD by selecting the closest 56 day AIRAC date without exceeding five years from the periodic review completion date.
- (6) Exception: The NDB/ARA and NDB (HELICOPTER) charts are exempt from the Regulatory Review Date requirements of the RCAP.

5.0 CONCLUSIONS

- (1) Compliance to this AC is required as follow:
 - (a) New RIP – Effective immediately; and
 - (b) Existing RIP –Required amendments must be identified at the next periodic review and completed by 2023-01-26.

6.0 INFORMATION MANAGEMENT

- (1) Not applicable.

7.0 DOCUMENT HISTORY

- (1) Advisory Circular (AC) 803-004 **Issue 02**, RDIMS 9219471 (E), 9254452 (F), dated 2014-06-30 – Restricted Instruments Procedures.
- (2) Advisory Circular (AC) 803-004 **Issue 01**, RDIMS 6005710 (E), 6081524 (F), dated 2011-06-17 – Restricted Instruments Procedures.

8.0 CONTACT OFFICE

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