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TP 4711-3E
(12/2020)

TP 4711

Air Operator

Certification Manual

Volume 1 – General Matters

Volume 2 – Commercial Air Operations

Volume 3 – Operations Specifications



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TP4711 VOLUME 3 – OPERATIONS SPECIFICATIONS

TABLE OF CONTENTS

CHAPTER 1 – INTRODUCTION.....	5
1.1 VOLUME 3 – OPERATIONS SPECIFICATIONS.....	5
1.1.1 Purpose.....	5
1.1.2 Application.....	5
1.1.3 Structure of this Volume.....	5
1.1.4 Typographic Conventions Used.....	6
1.1.5 Revisions.....	7
1.2 REFERENCES AND REQUIREMENTS.....	8
1.2.1 Reference Documents.....	8
1.2.2 Cancelled Documents.....	10
1.2.3 Definitions and Abbreviations.....	11
CHAPTER 2 – OPERATIONS SPECIFICATIONS.....	14
2.1 GENERAL.....	14
2.2 CONCEPTUAL NEED FOR OPERATIONS SPECIFICATIONS.....	14
2.3 LEGAL BASIS FOR OPERATIONS SPECIFICATIONS.....	15
2.4 MANDATORY APPROVALS.....	15
2.5 SPECIAL AUTHORIZATIONS/SPECIFIC APPROVALS.....	16
2.5.1 General.....	16
2.5.2 Requirements for the Creation of a New SA, or Amendment to an existing SA.....	16
CHAPTER 3 – PROCESS FOR ISSUANCE.....	17
3.1 ISSUANCE OF OPERATIONS SPECIFICATIONS.....	17
3.2 GUIDANCE CONTENT FOR OPERATIONS SPECIFICATIONS.....	17
3.2.1 Overview.....	17
3.2.2 Description.....	17
3.2.3 Requirements.....	17
3.2.4 Guidance for Issuance.....	18
3.2.5 Background Information.....	20
3.2.6 NACIS Guidance.....	20
3.2.7 Example as Depicted in the Operations Specifications.....	21
3.2.8 SA Conditions Statement.....	21
CHAPTER 4 – MANDATORY APPROVALS.....	23
4.1 CAR RULE.....	23
4.2 AIRCRAFT.....	25
4.3 TYPES OF OPERATION.....	27
4.4 TYPES OF SERVICE.....	29
4.5 TYPES OF AERIAL WORK.....	31
4.6 AREAS OF OPERATION.....	34
4.7 SPECIAL LIMITATIONS.....	37
CHAPTER 5 – SPECIAL AUTHORIZATIONS/SPECIFIC APPROVALS.....	39
5.1 SA GROUPINGS.....	39
5.1.1 ICAO Annex 6 SA's.....	39
5.1.2 SA Groupings in NACIS.....	39



5.2	DANGEROUS GOODS.....	40
5.2.1	Dangerous Goods (DG)	41
5.3	LOW VISIBILITY OPERATIONS – APPROACH & LANDING	45
5.3.1	APPROACH BAN OPERATIONS - AEROPLANES.....	46
5.3.2	CATEGORY I - ILS APPROACHES TO A DH 100' - HELICOPTERS.....	47
5.3.3	CATEGORY II – INSTRUMENT APPROACHES.....	48
5.3.4	Category II Instrument Approaches using Autoland/HGS (SA CAT II).....	50
5.3.5	CATEGORY III – INSTRUMENT APPROACHES	52
5.3.6	INSTRUMENT APPROACH PROCEDURES – MISSED APPROACH CLIMB GRADIENTS GREATER THAN 425 FT/NM.....	55
5.3.7	INSTRUMENT PROCEDURES – HELICOPTER PROCEDURES OFFSHORE – RNAV (GNSS)/AIRBORNE RADAR APPROACHES (ARA).....	56
5.3.8	INSTRUMENT PROCEDURES – RCAP – BILLY BISHOP – RNAV (GNSS) X - RWY 2657	
5.3.9	INSTRUMENT PROCEDURES – RCAP – BILLY BISHOP – RNAV (GNSS) W - RWY 08.....	59
5.3.10	INSTRUMENT PROCEDURES – RCAP – SALLUIT – RNAV (GNSS) X - RWY 03.....	61
5.3.11	INSTRUMENT PROCEDURES - RCAP – SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - RNP AR PROCEDURES	63
5.3.12	INSTRUMENT PROCEDURES - RCAP – SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - HELICOPTERS	64
5.3.13	INSTRUMENT PROCEDURES - RCAP – STANDARD RESTRICTED INSTRUMENT PROCEDURES	65
5.3.14	Land and Hold Short Operations (LAHSO).....	66
5.3.15	SIMULTANEOUS OPERATIONS IFR APPROACHES - GLS/ILS/LDA/RNAV PRM AND SOIA	67
5.4	LOW VISIBILITY OPERATIONS – TAKE-OFF.....	77
5.4.1	TAKE-OFF IN IMC – WEATHER BELOW LANDING MINIMA.....	78
5.4.2	TAKE-OFF MINIMA – REPORTED VISIBILITY BELOW RVR 600' DOWN TO AND INCLUDING RVR 300'	79
5.4.3	TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 600' - AEROPLANES.....	80
5.4.4	TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 600' - HELICOPTERS.....	81
5.4.5	TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (1/4 MILE).....	82
5.4.6	TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE- OUT TAKE-OFF PERFORMANCE)	83
5.4.7	TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	85
5.5	LOW VISIBILITY OPERATIONS – OPERATIONAL CREDITS	86
5.5.1	CATEGORY I - II - III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES	87
5.6	REDUCED VERTICAL SEPARATION MINIMA.....	91
5.6.1	Reduced Vertical Separation Minima (RVSM).....	92
5.7	EXTENDED DIVERSION TIME OPERATIONS	95
5.7.1	Extended Range Twin-Engined Operations (ETOPS)	96
5.8	NAVIGATION SPECIFICATIONS FOR PBN OPERATIONS	99
5.8.1	Aircraft Network Security Program (ANSP)	100
5.8.2	Canadian Minimum Navigation Performance Specifications (CMNPS)	102
5.8.3	Area Navigation 1 and 2 (RNAV 1 AND 2).....	104
5.8.4	Area Navigation 5 (RNAV 5)	105
5.8.5	Required Navigation Performance 1 (RNP 1).....	106
5.8.6	Required Navigation Performance 2 (RNP 2 (CONTINENTAL)).....	107
5.8.7	Required Navigation Performance 4 Airspace (RNP 4).....	108
5.8.8	Required Navigation Performance 10 Airspace (RNP 10)	109
5.8.9	Required Navigation Performance Approach (RNP APCH).....	110



5.8.10	Required Navigation Performance Authorization Required Approach (RNP AR APCH).....	113
5.8.11	Required Navigation Performance Radius To Fix Path Terminator (RNP – RADIUS TO FIX (RF) PATH TERMINATOR).....	115
5.8.12	Required Navigation Performance Capability (RNP).....	116
5.8.13	Required Navigation Performance Capability High Level Fixed Area Navigation Routes (RNP – HIGH LEVEL FIXED RNAV ROUTES).....	117
5.9	CONTINUING AIRWORTHINESS.....	118
5.9.1	Continuing Airworthiness.....	119
5.10	ELECTRONIC FLIGHT BAG.....	121
5.10.1	Electronic Flight Bag (EFB).....	122
5.11	AERIAL WORK.....	123
5.11.1	AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD.....	124
5.11.2	CARRIAGE OF PERSONS.....	125
5.11.3	CUSMA – SPECIALTY AIR SERVICES OPERATIONS.....	126
5.11.4	OPERATIONS OF AN AIRCRAFT OVER A BUILT-UP AREA.....	130
5.11.5	TAKE-OFF APPROACH OR LANDING WITHIN A BUILT-UP AREA.....	131
5.12	AIRCRAFT PERFORMANCE.....	133
5.12.1	DHC-6 TWIN OTTER – REDUCED GROUND ROLL (RGR) TAKE-OFF.....	134
5.12.2	EXCEPTIONS TO OPERATING LIMITATIONS – CONTAMINATED RUNWAYS.....	135
5.12.3	EXCEPTIONS TO OPERATING LIMITATIONS – RECIPROCATING ENGINES – CARGO ONLY.....	136
5.12.4	EXCEPTIONS TO OPERATING LIMITATIONS – TAKE-OFF WEIGHT – ACCELERATE-STOP DISTANCE.....	137
5.12.5	FUEL REQUIREMENTS – EN ROUTE FUEL RESERVE REDUCTION.....	138
5.12.6	NET TAKE-OFF FLIGHT PATH – VISUAL OBSTACLE AVOIDANCE.....	140
5.12.7	NET TAKE-OFF FLIGHT PATH – GREATER BANK ANGLE.....	141
5.12.8	TRANSPORT OF PASSENGERS OPERATING SINGLE-ENGINED AEROPLANES - IFR OR NIGHT VFR FLIGHT.....	142
5.13	FLIGHT CREW.....	143
5.13.1	ADVANCED QUALIFICATION PROGRAM.....	144
5.13.2	AEROPLANE GROUPING FOR PPC PURPOSES.....	145
5.13.3	FLIGHT ATTENDANT SEAT.....	146
5.13.4	FLIGHT CREW MEMBER QUALIFICATIONS.....	147
5.13.5	INCREASE IN FLIGHT DUTY PERIOD.....	149
5.13.6	INCREASE IN FLIGHT TIME.....	150
5.13.7	MINIMUM CREW WITHOUT A SECOND-IN-COMMAND.....	151
5.13.8	PROGRAM OF CONTROLLED REST ON THE FLIGHT DECK.....	152
5.13.9	TIME FREE FROM DUTY.....	153
5.14	HELICOPTER OPERATIONS.....	155
5.14.1	AIRCRAFT OPERATING OVER WATER - HELICOPTERS.....	156
5.14.2	ENTERING OR LEAVING A HELICOPTER IN FLIGHT.....	157
5.14.3	HELICOPTER CLASS B, C OR D EXTERNAL LOAD – BUILT-UP AREA OR AERIAL WORK ZONE.....	158
5.14.4	HELICOPTER CLASS B, C OR D EXTERNAL LOAD – NIGHT, VFR OTT OR IFR.....	159
5.14.5	HELICOPTER CLASS D EXTERNAL LOADS – MULTI-ENGINE (OEI CAPABLE).....	160
5.14.6	HELICOPTER CLASS D EXTERNAL LOADS (LIMITED) – SINGLE OR MULTI-ENGINE (NOT OEI CAPABLE).....	162
5.14.7	MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS.....	163
5.14.8	NUMBER OF PASSENGERS IN SINGLE-ENGINED HELICOPTERS.....	164
5.15	OPERATING AGREEMENTS.....	165
5.15.1	CAPACITY PURCHASE AGREEMENT.....	166



5.15.2	EXTENDED CHARTER.....	167
5.15.3	MANAGEMENT AGREEMENT.....	171
5.16	SPECIAL USE AIRSPACE.....	173
5.16.1	Automatic Dependent Surveillance-Broadcast Operations (ADS-B).....	174
5.16.2	Automatic Dependent Surveillance-Contract Operations (ADS-C)	175
5.16.3	Controller–Pilot Data Link Communications Operations (CPDLC)	176
5.16.4	North Atlantic – High Level Airspace Operations (NAT HLA).....	177
5.16.5	Performance Based Communication and Surveillance Operations (PBCS).....	180
5.17	OTHER	182
5.17.1	Air Ambulance Operations (AIR AMBULANCE)	183
5.17.2	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY – UNCONTROLLED AIRSPACE – AEROPLANES	190
5.17.3	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY – UNCONTROLLED AIRSPACE – HELICOPTERS.....	192
5.17.4	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES.....	194
5.17.5	NO ALTERNATE AERODROME - IFR FLIGHT - HELICOPTERS	195
5.17.6	Night Vision Imaging Systems Operations (NVIS).....	196
5.17.7	OPERATIONS BETWEEN POINTS ABROAD.....	198
5.17.8	REGISTRATION MARKS	200
APPENDIX A – ICAO ANNEX 6 OPERATIONS SPECIFICATION FORM		202
APPENDIX B – ICAO AREAS OF OPERATION MAP		204
APPENDIX C – CURRENT SA NAME TO OLD OPS SPEC #.....		205
APPENDIX D – OLD OPS SPEC # TO CURRENT SA NAME		209



Chapter 1 – Introduction

1.1 Volume 3 – Operations Specifications

1.1.1 Purpose

- (1) The purpose of this volume of the TP 4711 manual series is to provide a national standard, consistent with regulatory requirements for issuing or amending an operations specification, including all associated permissions.
- (2) This publicly available manual is applicable to all Transport Canada, Civil Aviation (TCCA) employees, operators, manufacturers, training providers, flight crews, and to individuals or organizations exercising privileges granted to them under an External Ministerial Delegation of Authority.

1.1.2 Application

- (1) This volume applies to:
 - (a) all certified commercial air operations falling within the scope of Part VII of the Canadian Aviation Regulations (CARs).
 - (b) holders of Private Operator Registration Documents (PORDs) issued under CAR subpart 604.
- (2) The instructions and guidance in this volume are to be applied in conjunction with those contained in the other volumes of the TP4711 manual series and other current guidance documents.
- (3) Considering the broad scope of operations covered by this manual, and the many variables involved, it is not possible to provide detailed procedures and guidance for all requirements.
 - (a) Sound judgement must be applied in the use of this manual.
 - (b) TCCA inspectors (CASIs) should have a thorough knowledge of the content of this manual series and adhere to the policies, procedures and guidelines contained herein.
 - (c) When a situation is encountered that goes beyond the scope of this manual series, and further guidance is desired, please contact AARTF – Commercial Flight Standards.

1.1.3 Structure of this Volume

- (1) Chapter 1 - Introduction
 - Contains general information on this Volume.
- (2) Chapter 2 – Operations Specifications
 - Includes background and explanation of operations specification in the Canadian regulatory context.
- (3) Chapter 3 – Process for Issuance
 - Provides general instructions for the process of issuing or amending operations specifications.
 - Describes the layout and expected content for each Approval listed in Chapter 4 & 5.
- (4) Chapter 4 – Mandatory Approvals
 - Gives detailed instructions on the issuance of Mandatory Approvals, which are required on all certificates.



(5) Chapter 5 – Special Authorizations / Specific Approvals

- Contains guidance material for all of the Special Authorizations/Specific Approvals (SA) available to air operators in Canada.
- Supplies detailed references and guidance, to be used when applying for, or reviewing an SA application.

(6) Appendices

- Includes supporting information relevant to Operations Specifications.

1.1.4 Typographic Conventions Used

1.1.4.1 Reference Box

- (1) Reference boxes regularly appear throughout the volume.
- (2) The reference box serves as a summary of:
 - (a) whether the subject is applicable to the reader (based on CAR Subpart);
 - (b) what regulatory references are applicable to the subject; and
 - (c) guidance documents that already exist on the subject.
- (3) **Thoroughly review the reference box and associated reference materials listed within it before proceeding on to the guidance provided below the reference box.**
 - (a) This volume is designed to provide assistance to both the applicant/operator and the CASI that goes beyond what is provided in current regulations, standards and published guidance documents.
 - (b) This volume will not restate or contradict any regulatory reference or published guidance material.

1.1.4.1.1 How to Interpret the Reference Box:

Figure 1 - EXAMPLE REFERENCE BOX

Subpart:	604	702	703	704	705
CAR:	N/A	702.22(3)(a)		N/A	N/A
CASS:	N/A	722.22		N/A	N/A
DOC(s):	AC 702-191				

- (1) Subpart column check:
 - (a) If there is a CAR and/or a CASS listed for a Subpart, then the subject of this section must be covered in the applicable manual/document.
 - i. Applicant/operators must describe how it is being met.
 - ii. CASIs must verify it has been met.
 - (b) If there is no CAR and/or CASS listed for a Subpart, and the box is left blank, then the subject of this section would be helpful to review.
 - i. Applicant/operators may find it beneficial to cover this subject in their procedures, but they are not required to do so.
 1. This should be considered as an example of adopting “best practices”.



- ii. CASIs going over a document and seeing this subject covered can review it for acceptability, but are not in a position to approve or deny it (i.e.; it is not a regulatory requirement for this Subpart).
 - 1. If what is described in the applicant/operators submission on this subject is not acceptable, then the inspector is required to inform the applicant/operator accordingly (i.e.; it will need to be revised, or removed from the document).
- (c) CAR and/or CASS Boxes that are greyed out with “N/A” in them indicate that this subject is not applicable for that Subpart operation.
 - i. This subject should not be addressed in an applicant/operators submissions/procedures (i.e.; skip this section).
 - ii. Inspectors should not see this subject addressed in an applicant/operators submissions.
 - 1. If it is, it must be removed by the applicant/operator.
- (2) CASS reference location:
 - (a) A letter before a CASS reference denotes that the reference is specific to a particular type of operation, as follows:
 - A – Aeroplanes
 - AV – Day VFR Aeroplanes
 - AI – IFR and Night VFR Aeroplanes
 - H – Helicopters
 - HV – VFR Helicopters
 - HI – IFR Helicopters
 - Note: As mentioned previously, it may be helpful to consider guidance provided on a subject even if it is not specifically required for your operation (e.g.; even though a CASS may be indicated as “AI”, there may be helpful information in that section for Aeroplane Day VFR operations).
- (3) Existing guidance documents:
 - (a) The **“DOC(s):”** box lists any current reference documents that the reader should review.
 - i. These documents provide material/guidance/interpretation that goes beyond the CAR or CASS they are related to.

1.1.5 Revisions

- (1) This document, along with all volumes in the TP 4711 manual series, are intended to be revised as required, based on user feedback. The goal is to provide a mechanism for continual improvement of not only the guidance contained within the series, but also of the tools provided that are meant to facilitate the application process.
 - (a) Transport Canada welcomes feedback regarding the processes, procedures and tools contained in this volume.
Please send feedback to:
TP4711@tc.gc.ca
- (2) As this volume (and the whole manual series) will be revised regularly, please make sure to be using the most current version.
 - (a) The latest revision can be found on the TCCA website, at:



<https://tc.canada.ca/en/aviation/publications/air-operator-certification-manual-tp-4711>

- (b) The expected revision cycle for the TP 4711 manual series will be each successive 180 day period.

1.2 References and Requirements

1.2.1 Reference Documents

- (1) AC 100-001 - Glossary for Pilots and Air Traffic Services Personnel
- (2) AC 401-004 - Conduct of Instrument Proficiency Checks
- (3) AC 521-004 - Changes to the Type Design of an Aeronautical Product
- (4) AC 602-002 - Aerodrome Operating Visibility
- (5) AC 603-001 - Use of Night Vision Imaging Systems
- (6) AC 700-001 - Dangerous Goods Special Authorization
- (7) AC 700-006 - Required Navigation Performance 4 (RNP 4) and Required Navigation Performance 10 (RNP 10) Airspace
- (8) AC 700-009 - Automatic Dependent Surveillance – Broadcast
- (9) AC 700-015 - En Route Area Navigation Operations RNAV 5 (Formerly B-RNAV)
- (10) AC 700-016 - Compliance with Regulations and Standards for Engine-Inoperative Obstacle Avoidance
- (11) AC 700-017 - Flight Crew Member Qualifications – Sections 702.65 and 703.88 of the CARs – Grouping Method for Recurrent PPC Purposes of Aeroplanes with a MCTOW of 7,000 Pounds and Less, Operating Pursuant To Subparts 702 and 703 of the CARs
- (12) AC 700-018 - Flight Crew Member Qualifications – Sections 702.65 and 703.88 of the CARs – List of Approved and Cancelled Groupings for Recurrent PPC Purposes of Aeroplanes Operating Pursuant to Subparts 702 and 703 of the CARs
- (13) AC 700-019 - Terminal and En Route Area Navigation Operations (RNAV 1 and 2)
- (14) AC 700-023 - Required Navigation Performance Approach (RNP APCH)
- (15) AC 700-024 - Required Navigation Performance Authorization Required Approach (RNP AR APCH)
- (16) AC 700-025 - Required Navigation Performance 1 (RNP 1)
- (17) AC 700-027 - Radius to Fix (RF) Path Terminator
- (18) AC 700-035 - Special Authorization for Take-off Operations below RVR 600 down to and including RVR 300
- (19) AC 700-038 - Performance-based Navigation (PBN) – Enroute
- (20) AC 700-039 - Requirements to Obtain Reduced Vertical Separation Minimum (RVSM) Special Authorization
- (21) AC 700-041 - Performance-Based Communication and Surveillance (PBCS)
- (22) AC 700-048 - DHC-6 Twin Otter – Reduced Ground Roll Take-off: Special Authorization and Guidance
- (23) AC 700-049 - Missed Approaches with Published Climb Gradients: Special Authorization and Guidance
- (24) AC 700-050 - Land and Hold Short Operations (LAHSO): Special Authorization and Guidance



- (25) AC 700-053 - SA CAT II: Special Authorization and Guidance
- (26) *Aeronautics Act*
- (27) AN No. B033 – Maintenance Requirements for the Issuance of Extended Charter and Points Abroad Operational Authority
- (28) *Canada Transportation Act*
- (29) *Canadian Aviation Regulations (CARs)* and associated Standards
- (30) CASA 2019-10 – North Atlantic High Level Airspace (NAT HLA)
- (31) FAA 8900.1, Volume 3, Chapter 18 - OpSpec/MSpec/LOA C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima —All Airports
- (32) FAA AC 00-60B - North American Free Trade Agreement and Specialty Air Services Operations
- (33) FAA AC 119-1 - Airworthiness and Operational Approval of Aircraft Network Security Program (ANSP)
- (34) FAA AC 135-14B - Helicopter Air Ambulance Operations
- (35) FAA AIM (Section 5-4-16)
- (36) Health and Welfare Canada, Medical Services Branch - Patient Care in Flight, Manual for Medical Services Personnel
- (37) ICAO NAT Doc 007 - North Atlantic Operations and Airspace Manual
- (38) ICAO Doc 7030 - Regional Supplementary Procedures
- (39) ICAO Doc 8335 – Manual of Procedures for Operations Inspection, Certification and Continued Surveillance
- (40) ICAO Doc 9613 - Performance-based Navigation Manual
- (41) ICAO NAT OPS Bulletin 2016_001 - Re-naming of the NAT MNPSA to NAT HLA
- (42) ICAO Technical Instructions (ICAO TI)
- (43) Nav Canada, Canada Air Pilot – General Pages (CAP GEN)
- (44) Policy Letter 169 - Development and implementation of an advanced qualification program (AQP).
- (45) SI 513-011 - Certification of Night Vision Imaging Systems
- (46) SI 700-003 - Review and Approval of Air Operator Submitted Helicopter Offshore Approach Procedures
- (47) TP 1490 - Manual of All Weather Operations (Categories II and III)
- (48) TP 1820 – Designated Airspace Handbook
- (49) TP 3077 - Flight Test Guide Private and Commercial Helicopter Licence
- (50) TP 4711 – Operator Certification Manual, Volume 1 & 2
- (51) TP 6327 - Safety Criteria for Approval of Extended Range Twin-Engine Operations (ETOPS)
- (52) TP 7087 – Safety Guide for Aircraft Charter Passengers
- (53) TP 9685 - Aeroplane and Rotorcraft Simulator Manual
- (54) TP 11524 – Foreign Air Operator Certification Manual
- (55) TP 12295 – Flight attendant Manual Standard
- (56) TP 12296 – Flight Attendant Training Standard



- (57) TP 14371 - Transport Canada Aeronautical Information Manual (TC AIM)
- (58) TP 14672 – AQP Evaluator Manual
- (59) Transportation of Dangerous Goods Act, 1992
- (60) Transportation of Dangerous Goods Regulations

1.2.2 Cancelled Documents

- (1) CBAAC No. 0243 - Instrument Landing System/Precision Runway Monitor Approaches - Operations Specification
- (2) IPB 2014-04 - The Requirement to Obtain Operations Specification 609 or 610 in Order to Receive ADS-B Surveillance Services in CDN Airspace
- (3) IPB 2016-02 - Process to Add Dangerous Goods Special Authorizations on Air Operator Certificates
- (4) Policy Letter 105 - 1200 RVR Beech 200
- (5) Policy Letter 145 - Helicopter Landings and Take-offs within the Built-up Areas of Cities and Towns
- (6) Policy Letter 170 - Approval of training required for issuing Operations Specification 602 - ILS/PRM Approaches
- (7) R745.08 - Operations Specifications
- (8) R745.08(g)(vi) - Authorizations for Navigation System
- (9) R745.08(g)(xi) - Authorizations - Others
- (10) S745.25(2) - Reduced Enroute Fuel Reserve - Designated Routes
- (11) S745.25(2)(e) - Enroute Airports
- (12) S745.25(2)(f)(ii) - Weather Availability
- (13) S745.25(2)(h) – Training on Foreign Rules
- (14) S745.25(3) – Reduced Enroute Fuel Reserve for the Portion of a Flight of a Flight Outside Domestic Airspace (Reclear)
- (15) R745.25(3) - Tasks to be Performed Before Being Granted with this Authorization
- (16) S745.25(3)(a) – Definition of Suitable Aerodrome
- (17) S745.25(3)(b) - Route Segmentation
- (18) S745.25(3)(b)(i) - Suitable Enroute Destination and Enroute Alternate
- (19) S745.25(3)(b)(iii) – Requirement for 5% of Fuel to Enroute Alternate
- (20) R745.47 – Transmissometer Requirements for Cat III Operations
- (21) S745.124(37) - Category II and III Operations
- (22) 745.124(55) - Training Program – Simultaneous Operations On Parallel or Near Parallel Instrument Runways – ILS/Precision Runway Monitor (PRM) and Localizer type Directional Aid (LDA)/PRM – Simultaneous Offset Instrument Approaches (SOIA)
- (23) TP 10839 - Guide to Air Ambulance Operations
- (24) By default, it is understood that the publication of a new edition of a document automatically renders any earlier editions of the same document null and void.
 - (a) Guidance contained in the previous edition of TP 4711 has now been superseded by content in Volumes 1, 2 & 3 of this new TP 4711 manual series.



1.2.3 Definitions and Abbreviations

- (1) Definitions for various terms can be found in the “Interpretation” sections of:
 - (a) CAR 101, at:
<https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-101.01>
 - (b) CAR 700, at:
<https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-700.01>
- (2) Further, Transport Canada has published a glossary of terms, definitions and abbreviations (AC 100-001 – *Glossary for Pilots and Air Traffic Personnel*). Please consult that document for definitions of terms commonly used in this manual series and other TCCA documents.
 - (a) AC 100-001 can be found at:
<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars/advisory-circular-ac-no-100-001>
- (3) For the purposes of this volume, to supplement those provided in the above sources, the following definitions are supplied:
 - (a) **Authorization:** An authorization entitles an operator, owner or pilot-in-command to undertake the authorized operations.
 - (b) **Charterer:** the entity who by way of a written agreement charts aircraft from a Canadian air operator in order to supplement the charterer’s fleet.
 - (c) **EDTO:** Any operation by an aeroplane with two or more turbine engines where the diversion time to an enroute alternate aerodrome is greater than the threshold time established by the State of the Operator.
 - (d) **ETOPS:** Any operation by an aeroplane with two or more turbine engines where the diversion time to an enroute alternate aerodrome is greater than the threshold time established by the State of the Operator. (EDTO may be referred to as ETOPS in some documents).
 - (e) **Operations Specification:** the authorizations, including Special Authorizations/Specific Approvals, conditions and limitations associated with the operator certificate and subject to the conditions in the operations manual.
 - (f) **Special Authorization:** an approval which is documented in the operations specifications. The term is interchangeable with Specific Approval.
 - (g) **Specific Approval:** an approval which is documented in the operations specifications. The term is interchangeable with Special Authorization.
 - (h) **Specialty Air Service:** Aerial Work operations conducted by aeroplanes or helicopters under the Canada-United States-Mexico Agreement.
- (4) The following **abbreviations** are used in this volume:
 - (a) **AARTF:** TCCA, Commercial Flight Standards;
 - (b) **ACP:** Approved Check Pilot
 - (c) **ADS-B:** Automatic Dependent Surveillance Broadcast
 - (d) **AFM:** Aircraft Flight Manual
 - (e) **AH:** Alert Height
 - (f) **AOC:** Air Operator Certificate
 - (g) **AQP:** Advanced Qualification Program



- (h) **CAA:** Civil Aviation Authority
- (i) **CARS:** *Canadian Aviation Regulations;*
- (j) **CASI:** Civil Aviation Safety Inspector
- (k) **CASS:** *Commercial Air Service Standards;*
- (l) **CMNPS:** Canadian Minimum Navigation Performance Specification
- (m) **COM:** Company Operations Manual
- (n) **CUSMA:** Canada-United States-Mexico Agreement
- (o) **DH:** Decision Height
- (p) **EDTO:** Extended Diversion Time Operations
- (q) **EFB:** Electronic Flight Bag
- (r) **ETOPS:** Extended Range Twin-Engine Operations
- (s) **GNSS:** Global Navigation Satellite System
- (t) **GPS:** Global Positioning System
- (u) **HUD:** Heads-Up Display
- (v) **ICAO:** International Civil Aviation Organization
- (w) **ILS:** Instrument Landing System
- (x) **LAHSO:** Land and Hold Short Operations
- (y) **LDA:** Localizer Type Directional Aid
- (z) **LP:** Localizer Performance
- (aa) **LPV:** Local Performance with Vertical Guidance
- (bb) **LNAV / VNAV:** Lateral Navigation / Barometric Vertical Navigation
- (cc) **MCM:** Maintenance Control Manual
- (dd) **NACIS:** National Aviation Company Information System;
- (ee) **NAT- HLA:** North Atlantic – High Level Airspace
- (ff) **NAT- MNPS:** North Atlantic – Minimum Navigation Performance Specifications
- (gg) **NVIS:** Night Vision Imaging System
- (hh) **Ops Spec:** Term previously used for Special Authorizations/Specific Approvals.
- (ii) **PORD:** Private Operator Registration Document
- (jj) **PBCS:** Performance Based Communication and Surveillance
- (kk) **PBN:** Performance Based Navigation
- (ll) **PRM:** Precision Runway Monitor
- (mm) **RCAP:** Restricted Canada Air Pilot
- (nn) **RCP:** Required Communication Performance
- (oo) **RDIMS:** Records, Document and Information Management System
- (pp) **RF:** Radius to Fix
- (qq) **RGR:** Reduced Ground Roll
- (rr) **RIP:** Restricted Instrument Procedure



- (ss) **RNAV**: Area Navigation
- (tt) **RNP**: Required Navigation Performance
- (uu) **RNPC**: Required Navigation Performance Capability
- (vv) **RSP**: Required Surveillance Performance
- (ww) **RVR**: Runway Visual Range
- (xx) **RVSM**: Reduced Vertical Separation Minimum
- (yy) **SA**: Special Authorization/Specific Approval
- (zz) **SOIA**: Simultaneous Offset Instrument Approach
- (aaa) **SOP**: Standard Operating Procedures
- (bbb) **TCAS**: Traffic Alert and Collision Avoidance System
- (ccc) **TCCA**: Transport Canada Civil Aviation
- (ddd) **TDG**: Transportation of Dangerous Goods
- (eee) **WAAS**: Wide Area Augmentation System



Chapter 2 – Operations Specifications

2.1 General

- (1) Operations Specifications are conditions, limitations, and Special Authorizations/Specific Approvals (SA) associated with the operator certificate/document.
 - (a) They are subject to the conditions detailed in:
 - i. The associated CAR and/or CASS;
 - ii. The associated Advisory Circular (AC);
 - iii. The conditions attached to an SA; and/or
 - iv. the company operations manual (COM).
 - (b) They may be issued in numerous forms including, but not limited to, Type of Operation, Special Limitation, Aircraft type, and Special Authorizations/Specific Approvals (SA).
- (2) This volume contains direction and guidance for issuance and amendment of operations specifications for:
 - (a) Subpart 604 private operators; and
 - (b) Part VII commercial operator certificate holders.
- (3) Unless otherwise noted, the term “operator,” when used in this volume, applies to:
 - (a) a private operations operator/company conducting Subpart 604 operations;
 - (b) an air transport service certificate holder conducting Subpart 705, 704 and 703 operations;
 - (c) an operator conducting aerial work operations under Subpart 702;
 - (d) a foreign air operator conducting Specialty Air Service (SAS) aerial work activities under Subpart 700; and
 - (e) a foreign air carrier or foreign person conducting Subpart 701 operations, as applicable.

2.2 Conceptual Need for Operations Specifications

- (1) Within the air transportation and training industry, there is a need to establish and administer safety standards to accommodate many operational variables.
 - (a) These variables include: a wide range of aircraft, varied operator capabilities, various operational requirements and the continual, rapid changes in aviation technology.
 - (b) It is impractical to address these variables through the promulgation of safety regulations for each and every type of air transport situation, and the varying degrees of operator capabilities. It is also impractical to address the rapidly changing aviation technology and environment through the regulatory process alone.
 - (c) Safety regulations would be extremely complex and unwieldy if all possible variations and situations were addressed by regulation. Instead, the safety standards established by regulation have a broad application that allows varying acceptable methods of compliance.
- (2) The operations specifications provide an effective method for establishing safety standards that are able to address a wide range of variables.
- (3) In addition, Operations Specifications can be adapted to a specific operator’s aircraft size and/or type of operation. That is, they can be tailored to suit an individual operator’s needs.



- (4) Only those approvals, limitations, standards, and procedures that are applicable to a certificate holder or operator need to be included in the operations specifications.

2.3 Legal Basis for Operations Specifications

- (1) The *Aeronautics Act* empowers the Minister of Transportation to issue operator certificates and registration documents that include the terms, conditions, and limitations reasonably necessary to ensure safety in air transportation to qualified operators.
- (2) The *Canadian Aviation Regulations (CARs)* state that an operator shall comply with the conditions and operations specifications in an AOC (or PORD) issued to that operator by the Minister.
- (3) The CARs require AOCs to contain operations specifications with respect to:
 - (a) Aircraft performance, equipment and emergency equipment requirements;
 - (b) Instrument approach procedures;
 - (c) Enroute aerodrome authorizations and limitations;
 - (d) Special weather minima authorizations;
 - (e) Authorizations concerning flight crew member qualifications and crew member complement;
 - (f) Navigation system authorizations;
 - (g) Pilot training and pilot proficiency checks;
 - (h) The operator maintenance control system approved pursuant to Subpart 706;
 - (i) Leasing arrangements,
 - (j) The use of synthetic flight training devices;
 - (k) In the case of a flight training unit that operates aeroplanes or helicopters, the conduct of flight training operations on a temporary basis at a satellite base, and
 - (l) Any other condition pertaining to the operation that the Minister deems necessary for aviation safety.
- (4) These regulations also stipulate that the Minister may add to or amend the operations specifications whenever necessary to address particular situations.
- (5) Additionally, the *Aeronautics Act* provides the Minister the ability cancel or suspend an operations specification for cause.
 - (a) For example, the Minister may refuse to issue or amend an AOC on the grounds that the operator does not meet the qualifications or no longer continues to meet the initial conditions of issuance for that document.

2.4 Mandatory Approvals

- (1) Mandatory approvals describe the primary conditions and limitations of a certificate.
- (2) These approvals are required for all certificates.
 - (a) All certificates have to contain information on the operating conditions that apply to the certificate.
- (3) There are seven categories of mandatory approvals:
 - (a) CAR Rule;
 - (b) Aircraft;
 - (c) Types of Operation;
 - (d) Types of Service;



- (e) Types of Aerial Work;
 - (f) Area of Operation; and
 - (g) Special Limitations.
- (4) Further details on the mandator approvals appear in Chapter 4.

2.5 Special Authorizations/Specific Approvals

2.5.1 General

- (1) Special Authorizations/Specific Approvals (SA's) describe conditions and limitations that are specific to each operator.
- (2) These SA's provide details on privileges given to the operator that are beyond the mandatory approvals.
- (3) SA's are grouped into 16 categories, based on the operational similarities within these groups.
- (4) There are a total eighty-six SA's currently being issued on Canadian AOC's.
- (5) Further details on the SA's appear in Chapter 5.

2.5.2 Requirements for the Creation of a New SA, or Amendment to an existing SA

- (1) Requests for the creation of new SA or amendment to an existing SA are to be submitted to AARTF, in HQ.
- (2) A new SA will typically require the creation of an accompanying AC, to describe the specifics of the operational capability possible under the SA, and to provide Conditions of Issuance to be associated with that SA.



Chapter 3 – Process for Issuance

3.1 Issuance of Operations Specifications

- (1) As at least some operations specifications are mandatory with the issuance of a certificate, the procedure for application for an operations specification follows the same process as that of any other certificate.
 - (a) See Volume 1 of this manual series for guidance on the general application process.
 - (b) See Volume 2 of this manual series for guidance on the domestic AOC application process.
- (2) It is possible that an operator will apply for an SA that they don't currently hold, or to have an SA they hold amended.
 - (a) This process, although likely more brief than a full application for an AOC, would also follow the standardized process for certificate applications.

3.2 Guidance Content for Operations Specifications

3.2.1 Overview

- (1) Guidance in Chapter 4 & 5 is provided under the following headings:
 - (a) Description;
 - (b) Requirements;
 - (c) Guidance for Issuance;
 - (d) Background Information;
 - (e) NACIS Guidance;
 - (f) Example as Depicted in the Operations Specifications; and
 - (g) SA Conditions Statement.

3.2.2 Description

- (1) This section describes the operations specification, including an explanation as to when this is applicable.
- (2) Any previous terminology, including the old *Ops Spec* number(s), are provided, for reference purposes.

Note: A cross-reference guide between the current names for SA's and the old *Ops Spec* numbers are provided in Appendices C & D.

3.2.3 Requirements

- (1) Using the tabular format, as presented and described in Volume 2 of this manual series, this section provides the applicable CAR, CASS and document references for the operations specification.
- (2) References should be read prior to proceeding with guidance provided underneath the applicable reference box in a section.
 - (a) Refer to Section 1.1.4.1 of Volume 2 for a full description of this procedure.



3.2.4 Guidance for Issuance

(1) This section contains details on:

- (a) What an operator will be required to submit; and
- (b) What an inspector reviewing the application will need to look for.

(2) **Common categories** for the guidance are used throughout this volume.

- (a) Where one or more of these **categories** is listed in an approval:
 - i. the “generic” guidance provided below, in (b), is applicable; and
 - ii. any supplemental guidance listed under that **category** in that approval is also relevant.

Note: Where a **category** is absent in the approval, the generic guidance listed below is not considered relevant to the approval.

(b) **Common categories** for the guidance are:

i. COM Content:

- 1. Approval requires an amendment to the COM in order to meet all regulatory requirements
- 2. The Operational Control System is part of the COM and must be suitable for the requested approval.

ii. SOPs Developed / Amended:

- 1. SOPs need to be developed and/or amended, in order to support the operations to be conducted under the approval.
- 2. TCCA will instruct the operator where to send all documentation.

iii. Training Program Content:

- 1. Approval requires an amendment to the Training Program, as required to suit the requested approval.
- 2. COM approval usually implies Training Program approval.

iv. Simulator Training:

- 1. All training programs must be approved prior to undertaking the training.
- 2. The specific Simulator is to be identified in the Approved Training Program
 - a. See TP 9685 – *Aeroplane and Rotorcraft Simulator Manual*, section 1.3.5.

v. Aircraft Performance:

- 1. For some aircraft types, TCCA must confirm that the aircraft has certified performance capabilities that meet or exceed the requirements stated with the approval or its associated documentation/guidance.
- 2. The operator will need to submit appropriate documentation to identify the performance capabilities of the aircraft.

vi. Aircraft Equipment:

- 1. Aircraft equipment requirements will need to be met.
 - a. Details will be found in the applicable CASS, supporting AC, or in the Conditions of Issuance of the approval.



2. Installation of equipment that involves a modification to the aircraft will need to comply with CAR 571.06, Repairs and Modifications, requirements and may involve the use of a Supplemental Type Certificate (STC), manufacturer's Service Bulletin (SB) or other forms of Approved or Specified data covering the installation.
3. Usually, the applicable AFM Section or Supplement will be submitted to show the equipment is suitable for the requested authority.
4. Aircraft equipment may be checked during an aircraft inspection.
5. Where the aircraft requires a Minimum Equipment List (MEL), any equipment items related to the Mandatory or Specific Approval must be in the MEL.

vii. Aircraft Inspection:

1. An aircraft inspection may be required.
 - a. The operator is advised to confer with TCCA to determine whether this activity needs to be accomplished.

viii. In-Flight or Simulator Check Flight:

1. To qualify for use of an authority, there will need to be an in-flight or simulator check flight.
 - a. RNAV systems for IFR operations will require this check (e.g.; RNP-C, CMNP, NAT-MNP, RNP-10, GPS Approaches, etc.)
2. an operator shall have an approved flight crew training and qualifications program, to include an in-flight check (of Sim) by an ACP.
3. A demonstration flight is required.

ix. Base Inspection:

1. A base inspection may be required, in order to verify the services available are adequate for the approval requested.
 - a. Specifics of the inspection will be indicated in the approval guidance.

x. Maintenance Approval / Acceptance:

1. The Maintenance Control System always needs to be suitable and adapted to the operator's aircraft and installed equipment, and described in the MCM. This is true for all operations, operators and approvals.
2. Specific entries for Maintenance guidance in an approval are to call attention to particular concerns for that approval.
3. TCCA shall verify all required documentation from the applicant/operator to confirm that all necessary maintenance control system requirements have been addressed with respect to CAR 706 within the Maintenance Control Manual (MCM).
 - a. These requirements may include defect rectification and control, technical dispatch and the training program.
4. Refer to Chapter 8 of Volume 2 for specific guidance.
5. This verification and confirmation will be carried out by a Civil Aviation Safety Inspector – Airworthiness.
6. Maintenance training related to the Mandatory or Specific Approval must be verified as meeting all applicable requirements.



xi. **Maintenance Schedule Amendment**

1. An amendment to the Maintenance Schedule may be required to meet all CAR 605.86 regulatory requirements.
2. Refer to Chapter 8 of Volume 2 for specific guidance.

xii. **Supporting Documentation:**

1. Documentation required to support the specific approval.
 - a. See the approval for individual requirements.

Note: These categories are used to control the content of the associated Job Aid that will be used when the applicant/operator applies for an Operations Specification(s).

3.2.5 Background Information

- (1) If listed in the approval, this section provides information on subject matter that relates to the approval.

3.2.6 NACIS Guidance

- (1) This section contains specific information on how the approval should be generated in NACIS.
 - (a) The TCCA person entering information into NACIS should refer to this section.
 - (b) Operators will not likely need to concern themselves with the information contained in this section.
- (2) Where there are choices that need to be selected/included in the “**DESCRIPTION**” and/or “**REMARKS**” fields, guidance on what to select/include will be contained in this section.
- (3) Where there are no instructions in this section, then the “**DESCRIPTION**” and/or “**REMARKS**” fields either have:
 - (a) no options to select;
 - (b) only one option; or
 - (c) no details that need to be entered.
- (4) “**DESCRIPTION**” and “**REMARKS**” fields can always be used as “free text” fields, to enter any desired content deemed appropriate by the issuing authority.
 - (a) If entering free text, the preferred method is to do so in the “**REMARKS**” section. If the character length of the free text field is insufficient under “**REMARKS**”, then the “**DESCRIPTION**” free text area could be used to extend this entry.

Note: Free text does not become available in the “**DESCRIPTION**” field until after one of the mandatory choices in that field is selected (i.e.; the choice of the mandatory option immediately opens up a free text field below where it is populated).

Note: Free text entries should be avoided, if possible, as the goal in providing “standardized” choices in NACIS is to have all AOC’s contain similar content.

- (5) The “**DESCRIPTION**” field typically contains the standardized terms applicable to the approval.
 - (a) This field is populated using a drop-down list format.
- (6) The “**REMARKS**” field is used for:
 - (a) automatically populated information, including type designators and registration marks (if selected when creating or amending the SA);



Note: For large fleets, or for operators who would prefer to only list make/model/series in an SA, aircraft registrations can be identified and associated with make/model/series using the SA **Registration Marks**.

Important: Where this option is chosen, the applicable SA should have an entry placed in the “REMARKS” section stating “***Please see the included SA Registration Marks for specific aircraft registrations associated with the Type Designator listed above.***”

- (b) specific information relevant to this SA that is not provided through drop-down choices in either of the “DESCRIPTION” or “REMARKS” fields. Common examples are:
 - i. pilot names and license numbers; and
 - ii. aircraft registration exclusions (when using the Type Designator or “ALL AIRCRAFT” choice for the SA).
- (c) the inclusion of the “**CONDITIONS ATTACHED**” statement, where the SA has mandatory conditions associated with its issuance.
 - i. This “**CONDITIONS ATTACHED**” entry is automatic (i.e.; it is not “selectable”, and should not be deleted on the AOC). It will appear on the AOC when the AOC is printed.

Note: If conditions pages are missing or removed from an AOC, the AOC is not a valid document.

3.2.7 Example as Depicted in the Operations Specifications

- (7) This section contains a representative example of how the operation specification can be expected to appear.
 - (a) As this is merely an example, it may not fully represent the resultant operations specification on an applicant/operators AOC.

3.2.8 SA Conditions Statement

- (1) Where the SA contains conditions, this section will reproduce those conditions.
 - (a) This provides the operator and TCCA with an opportunity to see the conditions that are applicable to the use of this SA, prior to its issuance.



Chapter 4 – Mandatory Approvals

4.1 CAR Rule

Description:

- (1) Each AOC is issued pursuant to one or more Subparts of the CARs Part VII.
 - (a) The relevant Subpart(s) is/are identified in Part II of the AOC.
- (2) The CAR options for an AOC are:
 - (a) 702 - Aerial Work
 - (b) 703 - Air Taxi Operations
 - (c) 704 - Commuter Operations
 - (d) 705 - Airline Operations

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	702.01	703.01	704.01	705.01
CASS:	--				
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of Part 7 subpart operations, see Volume 2 (Commercial Air Operations) of this manual series.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Base Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

NACIS Guidance:

- (1) “CAR Subpart:” is selected from the prepopulated “pull-down” list.
 - (a) Options are:
 - i. 702;



- ii. 703;
- iii. 704; or
- iv. 705.

(b) Only one CAR Subpart can be selected at a time for each “New” OC selection.

Example as Depicted in the Operations Specifications:

CAR Rule / Règle du RAC :	705
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4.2 Aircraft

Description:

- (1) For each CAR Rule in the AOC Part II, there is one or more associated aircraft make/model/series:
 - (a) Make/model/series is determined using the Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft
 - i. The CAST/ICAO taxonomy is available at:
<http://www.intlaviationstandards.org/>
 - (b) Master series may be used, if that make/model has been designated a master series (e.g. Boeing-737-700 or Boeing-777-300).
- (2) Aircraft make/model/series registered to an operator can be identified using the TCCA aircraft registration database, CCARCS
 - (a) CCARCS is available to TCCA inspectors through an internal computer software.
 - (b) The CCARCS web based access portal for both internal and external clients can be found at:

<https://wwwapps.tc.gc.ca/saf-sec-sur/2/ccarcs-riacc/RchSimp.aspx>

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	202.17(4)(a), 203.03(1), 702.08(f)(iii)	202.17(4)(a), 203.03(1), 703.08(f)(iii)	202.17(4)(a), 203.03(1), 704.08(f)(iii)	202.17(4)(a), 203.03(1), 705.08(f)(iii)
CASS:	--				
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of CAR Part 7 aircraft operations, see Volume 2 (Commercial Air Operations) of this manual series.

- (1) An applicant/operator must have custody and control of at least one aircraft.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:



NACIS Guidance:

- (1) Aircraft make/model/series (or master series) are selected from the auto-populated “pull-down” lists.
 - (a) First, select Aircraft (manufacturer) name using the “**CAST/ICAO Organization Common Name:**” field.
 - i. This action populates the choices in (b), below.
 - (b) Second, highlight all aircraft make/model/series for the applicant/operator from the options shown in the list “**CAST/ICAO Type Designator – Make Model– Master Series (or Series):**”
Note: These lists are populated through CCARCS, using aircraft that are registered to the applicant/operator.

Note: Registration marks cannot be included in this section.

Example as Depicted in the Operations Specifications:

Aircraft / Aéronef :	BOEING : B38M - BOEING 737 8 (8) B763 - BOEING 767 300 (375) B77L - BOEING 777 200 (233LR) B77W - BOEING 777 300 (333ER) B788 - BOEING 787 8 (8) B789 - BOEING 787 9 (9)
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4.3 Types of Operation

Description:

- (1) The type(s) of operation(s) the operator is approved for can include:
 - (a) Air transport service; or
 - (b) Aerial work.
- (2) Air Transport Services are further defined as:
 - (a) carrying passengers only;
 - (b) carrying passengers and/or cargo; or
 - (c) carrying cargo only.

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	702.08(f)(ii)	703.08(f)(ii)	704.08(f)(ii)	705.08(f)(ii)
CASS:	--				
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of Part 7 subpart operations, see Volume 2 (Commercial Air Operations) of this manual series.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Base Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

NACIS Guidance:

- (1) "Type(s) of Operation" is/are selected from the prepopulated list that becomes available when the CAR Subpart is selected.
 - (a) Options depend on what Subpart was chosen (as per Section 4.1 of this volume):
 - i. For Subpart 702, the option will be prepopulated by the Subpart selection:
 1. "Aerial Work".



ii. For Subparts 703, 704 or 705, the options are:

1. **“Aerial Work”**;
 - a. Select this option if the applicant/operator plans to provide sightseeing services.
2. **“Air Transport Service”**;
 - a. Select this option if the applicant/operator plans to conduct any other kind of passenger and/or cargo service(s).
3. **“Cargo”**; and
 - a. If Air Transport Service was selected, use this option to indicate the applicant/operator plans to conduct dedicated cargo services.
4. **“Passenger”**.
 - a. If Air Transport Service was selected, use this option to indicate the applicant/operator plans to conduct passenger services.

Note: More than one option may be selected; select all that apply.

Example as Depicted in the Operations Specifications:

Type(s) of Operation / Type(s) d'exploitation :	AIR TRANSPORT SERVICE / SERVICE DE TRANSPORT AÉRIEN CARGO / FRET PASSENGER / PASSAGER
--	---



4.4 Types of Service

Description:

- (1) The AOC Part II identifies the type(s) of service(s) an operator can provide.
- (2) Dependent upon the CAR Subpart an operator will work under, the options include:
 - (a) Domestic services; and/or
 - (b) International services.
- (3) International services can further be defined as:
 - (a) Scheduled services (i.e., under a regular timetable); and/or
 - (b) Non-scheduled services (i.e., on demand).
- (4) Definitions of these services can be found in the *Canada Transportation Act*.

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	702.08(f)(ii)	703.08(f)(ii)	704.08(f)(ii)	705.08(f)(ii)
CASS:	--				
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of CAR Part 7 types of service, see Volume 2 (Commercial Air Operations) of this manual series.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Base Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

NACIS Guidance:

- (1) The options for “**Type(s) of Service**” are dependent upon the Subpart selected for the operator (as per Section 4.1 of this volume):
 - (a) Operations under Subpart 702 cause this field to be “greyed out”, with no options listed.
 - (b) Operations under Subpart 703, 704 or 705 provide the following choices:



- i. **“Domestic”**;
 - 1. This option should be chosen if the operator will service any domestic locations.
- ii. **“Non-scheduled International”**; and
 - 1. This option is selected for international services that are provided on an “ad hoc” basis, that do not include services to scheduled points.
- iii. **“Scheduled International”**.
 - 1. If the operator will service international locations, following a regularly scheduled timetable, then this option is applicable.

Note: Scheduled points are to appear on the AOC, included in Part III.

- (c) This field (when available) can be selected for more than one option; select all that apply to the operator.

Example as Depicted in the Operations Specifications:

Type(s) of Service / Type(s) de service :	DOMESTIC / INTÉRIEUR NON-SCHEDULED INTERNATIONAL / INTERNATIONAL À LA DEMANDE SCHEDULED INTERNATIONAL / INTERNATIONAL RÉGULIER
--	--



4.5 Types of Aerial Work

Description:

- (1) Where **aerial work** has been specified under “Types of Operation” (see 4.3, above), this area of the AOC Part II is to contain the type(s) of aerial work authorized.
- (2) Aerial work can be conducted by an aeroplane or helicopter, and falls into one of the following categories (as provided in CAR 702.01(1)):
 - (a) the carriage on board of persons other than flight crew members;
 - (b) the carriage of helicopter Class B, C or D external loads;
 - (c) the towing of objects; or
 - (d) the dispersal of products.

Note 1: For operations carrying persons other than aircrew, and for operations carrying external loads, dedicated Specific Approvals must be obtained by the operator.

- See Chapter 5 Sections 11 & 14 of this volume, including the SA's:
 - AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD
 - CARRIAGE OF PERSONS
 - HELICOPTER CLASS B, C OR D EXTERNAL LOAD – BUILT-UP AREA OR AERIAL WORK ZONE
 - HELICOPTER CLASS B, C OR D EXTERNAL LOAD – NIGHT, VFR OTT OR IFR
 - HELICOPTER CLASS D EXTERNAL LOADS – MULTI-ENGINE (OEI CAPABLE)
 - HELICOPTER CLASS D EXTERNAL LOAD – MULTI-ENGINE (NOT OEI CAPABLE)

Note 2: For operations by Canadian operators in the U.S.A. or Mexico, the *Canada-United States-Mexico Agreement* applies, which will require the operator to obtain a Specific Approval.

- See Chapter 5 Section 11 of this volume, under the SA:
 - CUSMA – SPECIALTY AIR SERVICES OPERATIONS

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	702.08(f)(ii)	N/A	N/A	N/A
CASS:	--		--	--	--
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of Part 7 aerial work operations, see Volume 2 (Commercial Air Operations) of this manual series.

- (1) The following four categories, underlined, are now indicated on an operator certificate:

Note: For references purposes, each category has listed below it the aerial work activities that were previously included (and may still be) on legacy AOC's.

Note: Activities **highlighted in bold print** are those that can be conducted under the CUSMA.



(a) The carriage on board of persons other than flight crew members;

- i. **Aerial Inspection and Surveillance**
- ii. **Aerial Mapping**
- iii. **Aerial Photography**
- iv. **Aerial Surveying**
- v. **Forest Fire Management**
- vi. Flight Testing: Flight testing of avionics systems, navigation systems and other aircraft equipment
- vii. **Parachute Jumping**
- viii. Wild Life Management: The capturing of animals, the collecting of samples from animals, and the placing of telemetry equipment on animals.

Note: The transportation services for the retrieval of human organs for human transplants (previously listed as “Human Organs”) are no longer considered Aerial Work. Applicant/operators wishing to conduct this type of operation must obtain the SA “Air Ambulance Operations (AIR AMBULANCE)” on their AOC (see Chapter 5, Section 17 of this volume).

(b) The carriage of helicopter Class B, C or D external loads;

- i. **Aerial Construction**
- ii. Aerial Harvesting: harvesting of articles such as pine cones from tree tops.
- iii. External Load: the transportation of an external load.
- iv. **Heli-logging**
- v. Wild Life Management: the slinging carriage of animals to trailers for relocation.

(c) The towing of objects; or

- i. **Aerial Advertising**
- ii. **Glider Towing**

Note: Combat Air Support is an ‘activity related to defense’, and is no longer a supported aerial work activity under Civil Aviation Regulations.

(d) The dispersal of products.

- i. **Aerial Advertising**
- ii. **Aerial Spraying**
- iii. **Fire-fighting**
- iv. **Forest Fire Management**
- v. Wild Life Management: the dropping of bait.

Note: See Section 5.11.3, *CUSMA - Specialty Air Services (Aerial Work) Operations* for a description of the types of aerial work highlighted in bold print.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Performance:

Aircraft Equipment:



Aircraft Inspection:

Base Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

NACIS Guidance:

(1) Dependent upon the CAR Subpart selected for the operator (as per Section 4.1 of this volume), the options available for the field “**Type(s) of Aerial Work**” differ:

(a) For Subpart 702 operations, the list includes four options that should be selected from:

- i. “1. THE CARRIAGE OF PERSONS OTHER THAN FLIGHT CREW MEMBERS”;
- ii. “2. THE CARRIAGE OF HELICOPTER CLASS B, C OR D EXTERNAL LOADS”;
- iii. “3. THE TOWING OF OBJECTS”; and/or
- iv. “4. THE DISPERSAL OF PRODUCTS”.

Note: The numbers (1, 2, 3 & 4) have been included with these four options to make them show up at the beginning of the list.

Note: The list will continue to have the older aerial work activities displayed until a NACIS system level update can be completed; these older activities should not be selected.

(b) For Subpart 703, 704 or 705, this field will be limited to:

- i. “**Aerial Sightseeing**”.

(2) This field provides for one or more options; select all that apply to the operator.

Example as Depicted in the Operations Specifications:

Type(s) of Aerial Work / Type(s) de travail aérien :	1. THE CARRIAGE OF PERSONS OTHER THAN FLIGHT CREW MEMBERS / LE TRANSPORT DE PERSONNES AUTRE DES MEMBRES 2. THE CARRIAGE OF HELICOPTER CLASS B, C OR D EXTERNAL LOADS / LE TRANSPORT DE CHARGES EXTERNES DE CLASSES B, C, OU D 3. THE TOWING OF OBJECTS / LE REMORQUAGE D'OBJETS 4. THE DISPERSAL OF PRODUCTS / L'ÉPANDAGE DE PRODUITS
---	--



4.6 Areas of Operation

Description:

- (1) The AOC Part II will identify the area(s) of operation the operator will be authorized to work in, to include:
 - (a) from a point within to a point outside the area;
 - (b) between points within the area; and
 - (c) from a point outside to a point within the area.
- (2) There is no blanket authority for an air operator to conduct operations globally.
- (3) Approval to conduct operations will be for the following areas:
 - (a) North America (NAM);
 - (b) Caribbean (CAR);
 - (c) South America (SAM);
 - (d) North Atlantic (NAT);
 - (e) Pacific (PAC);
 - (f) Africa – Indian Ocean (AFI);
 - (g) Middle East / Asia (MID/ASIA);
 - (h) Europe (EUR); and
 - (i) Canada (reserved for Foreign Operations use only).
- (2) Areas of operation are defined in *ICAO Doc. 7030 - Regional Supplementary Procedures*
 - (a) A geographic map of the Areas of Operation can be found in Appendix B of this volume.

Note: The former “Points Abroad”, “Between Points in Canada” and “Canada and Abroad” authorizations have been replaced by the individual ICAO Area of Operation added to the AOC.

Requirements:

Subpart:	604	702	703	704	705
CAR:	N/A	702.08(f)(i)	703.08(f)(i)	704.08(f)(i)	705.08(f)(i)
CASS:	--				
DOC(s)	ICAO Doc. 7030 - Regional Supplementary Procedures				

Guidance for Issuance:

- (1) An air operator seeking the addition of a particular Area of Operation to their AOC should demonstrate compliance with the Area of Operation criteria found in *ICAO Doc. 7030 - Regional Supplementary Procedures*.

COM Content:

- (1) The areas of operation that the operator serves shall be described in their COM.
- (2) Where applicable, the Minimum Equipment List will be amended in accordance with more restrictive regional requirements.
- (3) The company Route Manual will include enroute charts, destination approach plates and alternate airport approach plates.



- (4) The operator must demonstrate the ability to meet the requirements of their Operational Control System in the desired Area of Operation(s) (e.g. flight following, ability to contact in flight, providing crews with flight plans and weather, etc.).
- (5) The Area of Operation must have identified suitable aerodromes as destinations and alternates.

SOPs Developed / Amended:

Training Program Content:

- (1) Flight crews on the above and may have to specially-qualify flight crews for high-risk airports if their mitigation strategies identify this;
- (2) If the operator is required to provide their flight crew with survival training, this training will be revised to incorporate environmental threats inherent to the Area of Operation that were not previously covered;
- (3) Air Traffic Control and procedural differences (e.g. PANS-OPS vs TERPS, altitude assignment in meters, altimeter settings in inches of mercury) need to be incorporated into the training program.
- (4) Proposed Area(s) of Operation shall be incorporated into the Route & Aerodrome competency training.

Aircraft Performance:

- (1) Takeoff, climb and landing performance expected in the Area(s) of Operation must be within the capability of the aircraft;

Aircraft Equipment:

- (1) The aircraft must meet the enroute navigation capability in that Area(s) of Operation (e.g. Europe is RNAV 5, Australia is RNP 2) as found in source documents such as *ICAO Doc 007* and *ICAO Doc 7030*;
- (2) The aircraft must be equipped with the required emergency and survival equipment, as applicable (e.g. life rafts);
- (3) If there a need for additional redundancy for communication and/or navigation capabilities (e.g. HF radio, satellite phone), the aircraft must be equipped accordingly.

Base Inspection:

Maintenance Approval / Acceptance:

- (1) The applicant/operator must define within their MCM how the company's maintenance control system (e.g. maintenance schedule and defect deferral requirements) will be satisfied for all areas of operation.
- (2) TCCA shall verify all required documentation from the operator to confirm that maintenance control system requirements have been addressed with respect to CAR 706 within the Maintenance Control Manual (MCM) for applicable areas of operation.

Maintenance Schedule Amendment:

Supporting Documentation:

Background Information:

- (1) A Hazard Identification & Risk Assessment is advised when an operator is applying for a new area of operation. Suggested questions to consider:
 - (a) What hazards has the company identified with this new area, and how will they mitigate the risks posed by those hazards? (e.g. volcanoes, combat zones, severe weather events, poor ATC support)
 - (b) What is the experience level of the operator in operating outside of North America? (e.g. is this the first new Area of Operation to be added?)



(c) Are the destinations to be served in the Area of Operation considered high-risk? (e.g. high terrain or elevation, lack of precision approaches)

(d) Is there a higher risk due to poor Search and Rescue support?

Note: As SMS operators, air operators overseen by National Operations (HQ) are required to conduct a Risk Assessment for all significant changes to their operation. The introduction of a new Area of Operation is considered a significant change.

NACIS Guidance:

(1) The following “Area(s) of Operation” are available for this field:

- (a) “Africa – Indian Ocean”;
- (b) “Caribbean”;
- (c) “Europe”;
- (d) “Middle East / Asia”;
- (e) “North America”;
- (f) “North Atlantic”;
- (g) “Pacific”;
- (h) “South America”; and
- (i) “Canada” (reserved for Foreign Operations use only).

(2) More than one Area of Operation can be chosen; select all that apply to the operator.

Example as Depicted in the Operations Specifications:

Area(s) of Operation / Zone(s) d'exploitation :	AFRICA - INDIAN OCEAN / AFRIQUE - OCÉAN INDIEN CARIBBEAN / LES CARAÏBES EUROPE MIDDLE EAST / ASIA / MOYEN-ORIENT / ASIE NORTH AMERICA / AMÉRIQUE DU NORD NORTH ATLANTIC / ATLANTIQUE NORD PACIFIC / PACIFIQUE SOUTH AMERICA / AMÉRIQUE DU SUD
--	--



4.7 Special Limitations

Description:

(1) This section of the AOC Part II lists the operational limitations applicable to the operator.

(a) Options are:

- i. Day Visual Flight Rules only;
- ii. Day and Night Visual Flight Rules;
- iii. Visual Flight Rules Over-The-Top; and
- iv. Visual and Instrument Flight Rules.

Requirements:

Subpart:	604	702	703	704	705
CAR:					
CASS:					
DOC(s)					

Guidance for Issuance:

Note: For guidance on the certification of Part 7 operational limitations, see Volume 2 (Commercial Air Operations) of this manual series.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Base Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

NACIS Guidance:

(1) Choose from the following options for operational limitations:

- (a) "Day VFR";
- (b) "Night VFR";
- (c) "VFR OTT"; and
- (d) "IFR".

(2) More than one operational limitation can be chosen; select all that apply to the operator.



Example as Depicted in the Operations Specifications:

Special Limitation(s) / Restriction(s) spéciale(s) :	IFR
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Chapter 5 – Special Authorizations/Specific Approvals

5.1 SA Groupings

5.1.1 ICAO Annex 6 SA's

- (1) Under ICAO Annex 6 (see Appendix A of this volume), SA's fall into one of the following Specific Approval categories:
 - (a) Dangerous Goods;
 - (b) Low Visibility Operations;
 - i. Approach and Landing;
 - ii. Take-off;
 - iii. Operational credit(s);
 - (c) RVSM;
 - (d) EDTO;
 - (e) AR Navigation Specifications for PBN Operations;
 - (f) Continuing Airworthiness;
 - (g) EFB; and
 - (h) Other

5.1.2 SA Groupings in NACIS

- (1) SA's are grouped in NACIS into one of the following categories:
 - (a) Dangerous Goods;
 - (b) Low Visibility Operations – Approach & Landing
 - (c) Low Visibility Operations – Take-off
 - (d) Low Visibility Operations – Operational credits
 - (e) Reduced Vertical Separation Minima;
 - (f) Extended Diversion Time Operations;
 - (g) Navigation Specifications for PBN Operations;
 - (h) Continuing Airworthiness;
 - (i) Electronic Flight Bag;
 - (j) Aerial Work
 - (k) Aircraft Performance
 - (l) Flight Crew;
 - (m) Helicopter Operations;
 - (n) Operating Agreements;
 - (o) Special Use Airspace; and
 - (p) Other.



5.2 DANGEROUS GOODS



5.2.1 Dangerous Goods (DG)

Description:

- (1) Approval to transport dangerous goods (DG) in passenger and/or crew baggage, in mail and/or in cargo.
- (2) Every operator transports dangerous goods, and must meet the dangerous goods requirements in the CARs and CASS.
 - (a) This SA:
 - i. is mandatory for all Part VII operators; and
 - ii. may be issued to 604 operators.
- (3) All operators must comply with the *Transportation of Dangerous Goods Regulations* and the *ICAO Technical Instructions* regarding Dangerous Goods.

Requirements:

Subpart:	604	702	703	704	705
CAR:	604.74(2)(a)	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xi)	705.08(g)(xi)
CASS:					
DOC(s)	AC 700-001, <i>Transportation of Dangerous Goods Regulations</i> , ICAO <i>Technical Instructions</i> (regarding Dangerous Goods)				

- (1) Operational Support Services:

Subpart:	604	702	703	704	705
CAR:		702.09(h)	703.07(2)(c)	704.07(1)(c)	705.07(2)(d)
CASS:		722.09(g)	723.07(3)(e), 723.07(2)(d)(vi)	724.07(3)(e), 724.07(5)(e)	720.07(4)(d)

- (2) COM Content:

Subpart:	604	702	703	704	705
CAR:		702.82	703.104	704.121	705.135, 705.139
CASS:		722.82(1)(t)	723.105(u), 723.105(v)	724.121(u)	725.135(u)

- (3) Training Program:

Subpart	604	702	703	704	705
CAR		702.76(vi)	703.98	704.115	705.124
CASS		722.76(17)	723.98(19), 723.98(16)	724.115(20), 724.115(17)	725.124(25)



Guidance for Issuance:

COM Content:

- (1) to reflect the requirements of the applicable CASS, listed above in Requirements (1) & (2).

Note: The acceptability of the COM content will be determined by the Transportation of Dangerous Goods Directorate (TDGD).

Training Program Content:

- (2) to reflect the requirements of the applicable CASS, listed above in Requirements (3).

Note: The acceptability of the training program will be determined by the TDGD.

Background Information:

- (1) It is understood that all operators carry dangerous goods.
- (a) many items carried in passenger and flight crew baggage are considered dangerous goods
 - i. air operators are responsible for ensuring that these items are transported safely.
 - (b) An air operator's personnel must receive training on how to:
 - i. identify DG items; and
 - ii. manage the risk of the DG being on board.
- (2) The CASI responsible for approving the AOC or PORD will only approve the portions related to the transportation of dangerous goods of an operator's submission based upon a written recommendation received from the TDG Directorate.
- (3) All portions of operator manuals and training programs relating to the transportation of dangerous goods shall be forwarded by the CASI or operator to the Compliance & Response Branch within the TDG Directorate at: TC.TDGAviation-TMDAviation.TC@tc.gc.ca.
- (a) Upon receipt, the TDG Compliance & Response Branch will acknowledge receipt of the documentation to the CASI/operator, and forward it to the appropriate TDG Regional Manager for action.
 - (b) All further communications related to the transportation of dangerous goods will take place between the inspector assigned to the file by the TDG Regional Manager and the operator directly.
 - i. This includes any requirements for corrections or modifications to the submission.
 - ii. The operator will submit any amendments to their submission directly to their delegated TDG inspector.
 - (c) Once the TDG inspector is satisfied that the operator's submission meets the required standard, the TDG inspector will forward his/her recommendation to TDG's Compliance and Response branch.
 - (d) The Compliance and Response Branch will then forward the recommendation to the TCCA CASI, along with any supporting documents.
 - i. The TDG Inspector will also advise the operator of their recommendation.
 - (e) Following issuance of the AOC to the operator, the CASI should notify the TDG Inspector.



- (4) If the TDG Directorate has determined that the operator is unwilling or unable to meet the required standards, the TDG Directorate will notify the CASI that they have ceased processing the submission, and include the reasons for their decision.
- (a) if no DG approval has been recommended from the TDG directorate, the AOC shall not be issued.

NACIS Guidance:

- (1) The selectable options in the “**DESCRIPTION**” field are “**YES**” or “**NO**”.
- (a) The Description of “**NO**” is used to indicate that an operator will not carry dangerous goods as mail or cargo.
- Note: This “**NO**” category includes the previous issued category “*DG Passenger/Crew Baggage Only*”.
- (b) The Description of “**YES**” is used to indicate that an operator is authorized to carry dangerous goods as cargo or mail.
- Note: This “**YES**” category includes the previous issued categories “*DG Cargo Only*”, “*DG Cargo and Mail*”, “*DG Passenger/Crew Baggage*”, “*Cargo and Mail*”, and “*DG Passenger/Crew Baggage and Mail*”.

Example as Depicted in the Operations Specifications:

DG	705.08(g) (xi)	Yes Oui	ALL AIRCRAFT TOUS LES AÉRONEFS
MD			



5.3 LOW VISIBILITY OPERATIONS – Approach & Landing



5.3.1 APPROACH BAN OPERATIONS - AEROPLANES

Description:

- (1) Authority to conduct an approach where the visibility report for a runway is less than the required minimum visibility for commercial operators (as stated in CAR 700.10) for that runway and approach type, based upon the runway's visibility report requirements listed in the *Canada Air Pilot*.
 - (a) This authority allows a commercial operator to use the reduced visibility requirements as indicated in the "APPROACH BANS – VISIBILITY" tables found in the applicable CAR Subparts.
- (2) Previously known as:
 - (a) "Operations Specification 019 – Approach ban operations" (703).
 - (b) "Operations Specification 303 – Approach ban operations" (704).
 - (c) "Operations Specification 503 – Approach ban operations" (705).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	700.10(3)(f), 703.41(2)&(3)	700.10(3)(f), 704.37(2)&(3)	700.10(3)(f), 705.48(2)&(3)
CASS	--	N/A			
DOC(s)	Nav Canada, Canada Air Pilot – General Pages (CAP GEN)				

Guidance for Issuance:

COM Content:

SOPs developed / amended:

Training Program Content:

Aircraft Equipment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

APPROACH BAN OPERATIONS - AEROPLANES INTERDICTIONS D'APPROCHE - AVIONS	705.48(2) (a)&(3)(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.2 CATEGORY I - ILS APPROACHES TO A DH 100' - HELICOPTERS

Description:

- (1) This SA permits a helicopter operator to conduct Category I ILS approaches to a 100' decision height (DH).
- (2) Previously known as:
 - (a) “Operations Specification 035 - Category I ILS Approaches to a DH 100' – Helicopters”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	704.08(g)(ii)	N./A
CASS	--	N/A	N/A	724.08(2)	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) to reflect the requirements of CASS 724.08(2)

Training Program Content:

- (1) to reflect the requirements of CASS 724.08(h)(i)(j)

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as detailed in CASS 724.08(2)(a)(g)

Aircraft Inspection:

In-Flight or Simulator Check Flight:

- (1) Demonstration flight to verify CASS 724.08(2)(d) can be met.

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “RVR 1200ft(350m) DH 100ft(30m)”.

Example as Depicted in the Operations Specifications:

CATEGORY I - ILS APPROACHES TO A DH 100' - HELICOPTERS APPROCHES AUX INSTRUMENTS DE CATÉGORIE I À UNE HAUTEUR DE DÉCISION (DH) DE 100 PI – HÉLICOPTÈRES	704.08(g) (ii)	RVR 1200 ft(350m) DH 100 ft (30m) RVR 1200 pi(350m) DH 100 pi (30m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.3 CATEGORY II – INSTRUMENT APPROACHES

Description:

- (1) Approval to conduct Category II instrument approaches (not including **SA Cat II** approaches)
- (2) Category II (CAT II) operations are defined as precision instrument approaches and landings with:
 - (a) a decision height lower than 200 feet (60 m) but not lower than 100 feet (30 m);
 - (b) a runway visual range not less than 1,200 feet (350 m) at RVR A; and
 - (c) a runway visual range not less than 600 feet (175 m) at RVR B.
- (3) This SA is only applicable to multi-engine turbo-prop aeroplanes operated by a crew of two pilots that are certified for CAT II Operations, and are capable of achieving the level of performance necessary to execute all the required manoeuvres safely at the aerodromes of intended take-off and landing.
 - (a) Any adverse conditions that are likely to be encountered during the execution of these manoeuvres will nullify the operator's ability to meet the requirements of this SA.
- (4) Previously known as:
 - (a) "Operations Specification 405 – Instrument Approaches – Category II" (604).
 - (b) "Operations Specification 016 – Instrument Approaches – Category II" (703).
 - (c) "Operations Specification 026 – Instrument Approaches – Category II" (704).
 - (d) "Operations Specification 065 – Instrument Approaches – Category II" (705).

Requirements:

Subpart	604	702	703*	704	705
CAR	604.51	N/A	703.08(g)(ii)	704.36	705.47
CASS	--	N/A	A723.88, A724.115(29)	A724.108, A724.115(29)	725.106, 725.124(37)
DOC(s)	TP 1490				

* 703 authorization is pursuant to the operator meeting the requirements of CAR 704.36

Guidance for Issuance:

COM Content:

SOPs Developed / Amended:

Training Program Content:

- (1) The training requirements listed in the applicable CASS (see "Category II and III Operations"); for 703 training requirements refer to CASS A724.115(29);
- (2) The PPC for Category II Operations shall be conducted in accordance with Schedule I of CASS A723.88, A724.108, or 725.106; and
- (3) In addition to the training required by the applicable CASS, additional considerations should be given during pilot training to training for anomalies at specific airports that could increase the work load of the flight crew members during an approach and landing (e.g.: airports that are known for having moderate turbulence on approach, potential radar altimeter irregularity caused by rough terrain on short final, etc.).



Simulator Training:

- (1) The CAT II Instrument Approach training in the synthetic flight training device (SFTD) shall include the following elements:
 - (a) two approaches, at least one of which is in an engine-out configuration;
 - (b) a missed approach from the lowest minima specified in the SA, or a rejected landing, as applicable;
 - (c) an automatic landing or a manual landing from one of the approaches, as applicable, at the maximum crosswind authorized for the aircraft
- (2) The levels of training and the quantum of training that are acceptable in using these Flight Simulation Training Device (FSTD) are listed in the applicable CASS.

Aircraft Equipment:

- (1) The aircraft requirements and airborne equipment shall be compliant with Chapter 2 of TP 1490 (Category II and III).

Aircraft Inspection:

Maintenance Approval / Acceptance:

- (1) The aircraft equipment shall be certified to meet the design requirements of Part V of the CARs as detailed in Chapter 2 of TP 1490 (Category II and III) and applicable to the aircraft type.
 - (a) In addition, the aircraft shall be certified for CAT II operations in its AFM Supplement and/or its Pilot Operating Handbook.
- (2) The MCM shall contain detailed procedures related to Cat II operations; see TP 1490 for guidance.

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there are three options:
 - i. “RVR A 1200ft(350m) RVR B 600ft(175m) DH 100ft(30m)”;
 - ii. “RVR A 1200ft(350m) RVR B 600ft(175m) DH 200ft(60m)”;
 - or
 - iii. “Minima as authorized by the State of the Operator or lowest published, whichever is most restrictive”, used for Foreign AOC’s only.

Example as Depicted in the Operations Specifications:

CATEGORY II - INSTRUMENT APPROACHES APPROCHES AUX INSTRUMENTS - CATÉGORIE II	705.47(1) (a)	RVR A 1200 ft(350m) RVR B 600ft (175m) DH 100 ft(30m) RVR A 1200 pi(350m) RVR B 600 pi(175m) DH 100 pi(30m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.4 Category II Instrument Approaches using Autoland/HGS (SA CAT II)

Description:

- (1) Approval to conduct a Category II Instrument Landing System (ILS) approach with a Decision Height (DH) as low as 100 feet and Runway Visual Range (RVR) as low as 1200 feet when using an aeroplane equipped with an approved Automatic Landing (Autoland) system or Heads Up Guidance System (HGS).
 - (a) Specifically, conducting a Cat II approach utilizing Cat I certified aerodrome facilities.
- (2) Category II (CAT II) operations are defined as a precision instrument approach and landing with:
 - (a) a decision height lower than 200 feet (60 m) but not lower than 100 feet (30 m);
 - (b) a runway visual range not less than 1,200 feet (350 m) at RVR A; and
 - (c) a runway visual range not less than 600 feet (175 m) at RVR B.

Requirements:

Subpart	604	702	703	704	705
CAR	604.51	N/A	N/A	704.08(g)(i), 704.08(g)(xi)	705.08(g)(i), 705.08(g)(xi)
CASS	--	N/A	N/A		
Doc(s)	AC 700-053, TP 1490				

Guidance for Issuance:

Note: See AC 700-053 for specific guidance information

COM Content:

Training Program Content:

Simulator Training:

Aircraft Equipment:

- (1) The aircraft requirements and airborne equipment shall be compliant with Chapter 2 of TP 1490 (Category II and III).

Aircraft Inspection:

Maintenance Approval / Acceptance:

- (1) The aircraft equipment shall be certified to meet the design requirements of Part V of the CARs in accordance with Chapter 2 of TP 1490 (Category II and III), as applicable to the aircraft type.
 - (a) In addition, the aircraft shall be certified for CAT III operations in its AFM Supplement and/or its Pilot Operating Handbook.
- (2) The MCM shall contain detailed procedures related to Cat II operations; see TP 1490 for guidance.

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there are two options:



- i. “RVR A 1200ft(350m) RVR B 600ft(175m) DH 100ft(30m)”;
- or
- ii. “Minima as authorized by the State of the Operator or lowest published, whichever is most restrictive”, used for Foreign AOC’s only.

Example as Depicted in the Operations Specifications:

SA CAT II	705.08(g)(i)	RVR A 1200 ft(350m) RVR B	ALL AIRCRAFT
AS CAT II	& 705.08	600ft (175m) DH 100 ft(30m)	TOUS LES AÉRONEFS
	(g)(xi)	RVR A 1200 pi(350m) RVR B	
		600 pi(175m) DH 100 pi(30m)	



5.3.5 CATEGORY III – INSTRUMENT APPROACHES

Description:

- (1) Approval to conduct Category III precision instrument approaches.
 - (a) Cat III A approaches require RVR A, B & C to all be at or greater than 600 feet, with a Decision Height between 100 feet and the surface (No DH....not a limiting factor).
 - (b) Cat III B approaches require RVR A, B & C to all be less than 600 feet, but not less than 150 feet, with a Decision Height between 50 feet and the surface (No DH....not a limiting factor).
 - i. Where approaches are completed using an Autoland system, and Decision Heights are not limiting, Alert Heights (AH) may be set for the operation.
 - (c) Cat III C approaches have no runway visual range limitations, and no decision height.
- (2) Previously known as:
 - (a) “Operations Specification 408 – Instrument Approaches – Category III” (604)
 - (b) “Operations Specification 036 – Instrument Approaches – Category III” (704)
 - (c) “Operations Specification 076 – Instrument Approaches – Category III” (705)

Requirements:

Subpart	604	702	703	704	705
CAR	604.51	N/A	N/A	704.36	705.47
CASS	624.26(2)	N/A	N/A	724.115(29)	725.124(37)
DOC(s)	TP 1490				

Guidance for Issuance:

COM Content:

Training Program Content:

- (1) The training requirement applicable to this approval is contained in subsections 724.115(29) or 725.124(37) of the *Commercial Air Service Standards*, 624.26(2) of the *Private Operator Passenger Transportation Standard*, and TP 1490 Manual of All Weather Operations (Categories II and III).
- (2) In addition to the training required by the applicable Standards, additional considerations should be given during pilot training to covering the issue of anomalies at specific airports that could increase the work load of the flight crew members during an approach and landing, such as airports that are known for having moderate turbulence on approach, potential radar altimeter irregularity caused by rough terrain on short final, etc.

Aircraft Equipment:

- (1) The aircraft requirements and airborne equipment shall be compliant with Chapter 2 of TP 1490 (Category II and III).

Aircraft Inspection:

Maintenance Approval / Acceptance:

- (1) The aircraft equipment shall be certified to meet the design requirements of Part V of the CARs in accordance with Chapter 2 of TP 1490 (Category II and III), as applicable to the aircraft type.



- (a) In addition, the aircraft shall be certified for CAT III operations in its AFM Supplement and/or its Pilot Operating Handbook.
- (2) The MCM shall contain detailed procedures related to Cat III operations; see TP 1490 for guidance.

Maintenance Schedule Amendment:

Background Information:

- (1) Transmissometer Requirements for Cat III Operations:
 - (a) the Manual of All Weather Operations, Section 3.5.1(b)(v) states that an ILS approach to Cat III minimum shall not be commenced unless there is RVR reporting systems at the touchdown (RVR A), mid-point (RVR B) and rollout (RVR C) areas;
 - (b) RVR C is advisory on Cat II approaches, but it is an essential part of Cat III. If RVR C becomes unserviceable, operations have to revert to Cat II;
 - (c) CARs section 602.130 states that all three RVRs have to be at or above the minimum specified in the CAP.

NACIS Guidance:

- (1) The “**DESCRIPTION**” section contains the limitations for this SA.
 - (a) Category III A and III B are denoted by the first letter of the options.
 - (b) The following options are available, one of which must be chosen:
 - i. “**CAT III(A) - RVR A/B/C 1200ft(350m) DH 100ft(30m)**”;
 - ii. “**CAT III(A) - RVR A/B/C 600ft(175m) DH 100ft(30m)**”;
 - iii. “**CAT III(A) - RVR A/B/C 600ft(175m) DH 50ft(15m)**”;
 - iv. “**CAT III(A) - RVR A/B/C 600ft(175m) NO DH AH 100ft(30m)**”;
 - v. “**CAT III(A) - RVR A/B/C 600ft(175m) NO DH AH 50ft(15m)**”;
 - vi. “**CAT III(B) - RVR A/B/C 150ft(50m) NO DH AH 200ft(60m)**”;
 - vii. “**CAT III(B) - RVR A/B/C 150ft(50m) NO DH AH 100ft(30m)**”;
 - viii. “**CAT III(B) - RVR A/B/C 150ft(50m) NO DH AH 50ft(15m)**”;
 - ix. “**Minima as authorized by the State of the Operator or lowest published, whichever is most restrictive**”, used for Foreign AOC’s only.
- (2) Where there are different limitations required for different aircraft, there are two options:
 - (a) The preferred option is to select the SA “**CATEGORY III – INSTRUMENT APPROACHES**”, choose the applicable aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields, and then select the appropriate limits in the “**DESCRIPTION**” field drop-down list (i.e.; only one limit is chosen).
 - i. If there are aircraft exclusions that need to be noted, add them to the “**REMARKS**” field using the free text option, noting the aircraft type and registration, and its specific limits.

Note: Free text entries have limited character length. The option to use the SA “**REGISTRATION MARKS**”, can also be used if excluded aircraft are all contained in one make/model/series, and then this remark can just list the applicable make/model/series (see Section 3.2.5(6)a “**Note**” in this volume, for the use of this “**REGISTRATION MARKS**” SA).



- (b) For operators that have large number of aircraft that can be grouped under multiple common minima, each group of aircraft can be listed under a separate “**CATEGORY III – INSTRUMENT APPROACHES**” SA.
- i. There are four SA’s containing the text “**CATEGORY III – INSTRUMENT APPROACHES**”; they are specifically labelled “**CATEGORY III – INSTRUMENT APPROACHES**”, “**CATEGORY III – INSTRUMENT APPROACHES #2**”, “**CATEGORY III – INSTRUMENT APPROACHES #3**”, and “**CATEGORY III – INSTRUMENT APPROACHES #4**”.
1. The first group of aircraft can be contained in the “**CATEGORY III – INSTRUMENT APPROACHES**” SA (as per (2)a., above), and the “**DESCRIPTION**” field should be selected for the first line of minima.
 2. The second group of aircraft can be added to the second SA “**CATEGORY III – INSTRUMENT APPROACHES #2**”, and the “**DESCRIPTION**” field should contain the second line of minima option.
 3. “**CATEGORY III – INSTRUMENT APPROACHES #3**” and “**CATEGORY III – INSTRUMENT APPROACHES #4**” can be used for other groups with other lines of limits (as required).
 4. Where aircraft groupings cannot contain enough detail within the four possible SA’s (each with a specific limits in the “**DESCRIPTION**” field, the exclusion methodology mentioned in (2)a.i., above, can also be used.
 5. If a company requires more than four groups of limits for this SA, more SAs for “**CATEGORY III – INSTRUMENT APPROACHES**” can be added by AARTF.

Example as Depicted in the Operations Specifications:

CATEGORY III - INSTRUMENT APPROACHES APPROCHES AUX INSTRUMENTS - CATÉGORIE III	705.47(1) (a)	CAT III(A) - RVR A/B/C 600 ft (175m) DH 50 ft(15m) CAT III(A) - RVR A/B/C 600 pi (175m) DH 50 pi(15m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.6 INSTRUMENT APPROACH PROCEDURES – MISSED APPROACH CLIMB GRADIENTS GREATER THAN 425 FT/NM

Description:

- (1) Approval to conduct instrument approach procedures in an aeroplane, where the missed approach procedure will require a climb gradient of greater than 425 Ft/NM.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(ii), 702.08(g)(xii)	703.08(g)(ii), 703.08(g)(x)	704.08(g)(ii), 704.08(g)(xi)	705.08(g)(ii), 705.08(g)(xi)
CASS					
DOC(s)	AC 700-049				

Guidance for Issuance:

Note: See AC 700-049 for specific guidance information

COM Content:

- (1) To include Operational Control measures

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT APPROACH PROCEDURES - MISSED APPROACH CLIMB GRADIENTS GREATER THAN 425 FT/NM PROCÉDURES D'APPROCHE AUX INSTRUMENTS - PENTES DE MONTÉE D'APPROCHE INTERROMPUE SUPÉRIEURES À 425 PI/NM	705.08(g) (ii) & 705.08(g) (xi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.7 INSTRUMENT PROCEDURES – HELICOPTER PROCEDURES OFFSHORE – RNAV (GNSS)/AIRBORNE RADAR APPROACHES (ARA)

Description:

- (1) This Special Authorization permits the operator to conduct an offshore instrument approach using RNAV (GNSS) / ARA.

Note: As an alternative to applying for this SA, an air operator may choose to develop their own offshore helicopter instrument approach. Refer to SI 700-003 - *Review and Approval of Air Operator Submitted Helicopter Offshore Approach Procedures*.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.08(g)(vii)	704.08(g)(viii)	N/A
CASS	--	N/A	723.08(1)(a)	724.08(1)	N/A
DOC(s)	SI 700-003 (as an alternative to acquiring this SA)				

Guidance for Issuance:

COM Content:

- (1) to reflect the requirements of CASS 723.08(1)(a)(iv)(l) or 724.08(1)(d)(ix).

SOPs developed / amended:

- (1) to reflect the requirements of CASS 723.08(1)(a)(iv)(l) or 724.08(1)(d)(ix).

Training Program Content:

- (1) to reflect the requirements of CASS 723.08(1)(a)(v) or 724.08(1)(e).

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as detailed in CASS 723.08(1)(a)(i)&(ii) and or 724.08(1)(a)&(b).

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - HELICOPTER PROCEDURES OFFSHORE - RNAV (GNSS)/AIRBORNE RADAR APPROACHES (ARA) PROCÉDURES AUX INSTRUMENT - PROCÉDURES AUX HELICOPTÈRES - RNAV (GNSS)/APPROCHES RADAR AÉROPORTÉ (ARA)	704.08(g) (iii) & 704.08(g) (viii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.8 INSTRUMENT PROCEDURES – RCAP – BILLY BISHOP – RNAV (GNSS) X - RWY 26

Description:

- (1) Approval to conduct instrument approaches, as published in the RCAP for the RNAV (GNSS) Billy Bishop Airport for Runway 26.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.08(g)(ii)	704.08(g)(ii)	705.08(g)(ii)
CASS	--	N/A			
DOC(s)					

Guidance for Issuance:

Note: See the SA Conditions Statement, below, for specific guidance information.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - BILLY BISHOP - RNAV (GNSS) X - RWY 26 PROCÉDURES AUX INSTRUMENT - RCAP - PISTE 26 DE L'AÉROPORT BILLY BISHOP - APPROCHES RNAV (GNSS) X	705.08(g)(ii)		ALL AIRCRAFT TOUS LES AÉRONEFS CONDITIONS ATTACHED CONDITIONS ATTACHÉES
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SA Conditions Statement:

The authority for **INSTRUMENT PROCEDURES - RCAP - BILLY BISHOP - RNAV (GNSS) X - RWY 26** is granted subject to the following condition(s):

- (1) The aircraft shall be certified and equipped to fly a glide path angle of 3.98 degrees;
- (2) Flight Crew shall be trained to fly approaches with a glide path angle of 3.98 degrees and shall be trained and familiar with all of the conditions associated with this approach procedure;
- (3) The air operator shall have established procedures in its company operations manual for the guidance of its personnel;
- (4) The APAPI system shall be in operation;
- (5) A Visual Alignment Guidance System (VAGS) shall be in operation when the reported ceiling is less than 500 feet and the reported visibility is less than 3 statute miles;
- (6) The simple touchdown zone lights shall be in operation;
- (7) Yellow runway edge lights on the last third of the runway shall be in operation;



- (8) *The marine radar shall be in operation when the weather is below 1000 ft. ceiling and 3 statute miles visibility;*
- (9) *When advised by ATC, prior to receiving approach clearance, that there is activity within the Marine Exclusion Zone (MEZ) at either end of Runway 26, the flight crew shall not commence the RNAV (GNSS) X RWY 26 approach until subsequently advised by ATC that the MEZs are clear; and*
- (10) *When advised by ATC, after receiving approach clearance, that there is activity within the MEZs, the flight crew shall discontinue the approach unless the aircraft has descended below the minimum decision height (DH) and the flight crew has visual contact with the marine vessel.*



5.3.9 INSTRUMENT PROCEDURES – RCAP – BILLY BISHOP – RNAV (GNSS) W - RWY 08

Description:

- (1) Approval to conduct instrument approaches, as published in the Restricted Instrument Procedure (RIP) in the RCAP for the RNAV (GNSS) Runway 08 approach at Billy Bishop Airport.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.08(g)(ii)
CASS	--	N/A	N/A	N/A	
DOC(s)					

Guidance for Issuance:

Note: See the SA Conditions Statement, below, for specific guidance information.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - BILLY BISHOP - RNAV (GNSS) W - RWY 08 PROCÉDURES DE VOL AUX INSTRUMENTS – RCAP – PISTE 08 DE L'AÉROPORT BILLY BISHOP – RNAV (GNSS) W	705.08(g)(ii)		ALL AIRCRAFT TOUS LES AÉRONEFS CONDITIONS ATTACHED CONDITIONS ATTACHÉES
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SA Conditions Statement:

The authority for **INSTRUMENT PROCEDURES – RCAP – BILLY BISHOP – RNAV (GNSS) W - RWY 08** is granted subject to the following condition(s):

- (1) This procedure shall only be applicable to Transport Canada approved Dash-8 Q400 operators;
- (2) A minimum missed approach climb gradient of 430 ft./nm to 2000 ft., shall be commenced immediately at the missed approach point;
- (3) Flight Crew shall be trained and familiar with all of the conditions associated with this approach procedure;
- (4) The air operator shall have established procedures in its company operations manual for the guidance of its personnel;
- (5) Aircraft capability: TOGA to LNAV capability shall be required;
- (6) Touchdown limit lights shall be installed and operational;
- (7) When advised by ATC, prior to receiving approach clearance, that there is activity within the Marine Exclusion Zone (MEZ) at either end of Runway 08, the flight crew shall not commence



the RNAV (GNSS) W RWY 08 approach until subsequently advised by ATC that the MEZs are clear;

- (8) When advised by ATC, after receiving approach clearance, that there is activity within the MEZs, the flight crew shall discontinue the approach unless the aircrew has descended below the minimum decision height (DH) and the flight crew has visual contact with the marine vessel;*
- (9) All engine approach climb capability shall meet or exceed required missed approach climb gradient using standard operating procedures for missed approaches;*
- (10) Aircraft must be equipped with serviceable WAAS capable equipment approved for LPV approaches;*
- (11) Specific RNAV (GNSS) W RWY 08 to LPV minimums approach and missed approach procedures shall be part of approved training program;*
- (12) Operators with approved Safety Management System (SMS) and Quality Assurance processes shall address maintenance of instrument approach procedures, deviations from SOP during training, reports within the SMS concerning the RNAV (GNSS) W RWY 08 approach, and have an effective Flight Data Management program;*
- (13) Weather restrictions: there shall be no tailwind landing component;*
- (14) Operators SOP's shall require crew to brief missed approach considering all engines operating and engine failure procedures;*
- (15) Operators shall have Engine Inoperative procedures in place; and*
- (16) Operators shall have balked landing training program in place.*



5.3.10 INSTRUMENT PROCEDURES – RCAP – SALLUIT – RNAV (GNSS) X - RWY 03

Description:

- (2) Approval to conduct instrument approaches, as published in the RCAP for the RNAV (GNSS) Salluit Airport for Runway 03.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.08(g)(ii)	704.08(g)(ii)	705.08(g)(ii)
CASS	--	N/A			
DOC(s)					

Guidance for Issuance:

Note: See the SA Conditions Statement, below, for specific guidance information.

COM Content:

SOPs Developed / Amended:

Training Program Content:

- (1) The training program:
 - (a) shall include both ground and flight training for steep approaches, including any requirements specific to the 4.8 degree approach at Salluit.
 - (b) must be specific to each aircraft type planned/operated by the flight crew into Salluit.
 - (c) may consist of all simulator time, a combination of simulator and aircraft flight training time, or be all aircraft flight time.
- (2) Where aircraft training is included in the steep approach training program, it shall be conducted under simulated IMC at the Salluit airport, flying the *Salluit, QC (CYZG) RNAV (GNSS) X RWY 03 Steep Approach*.

Simulator Training:

- (1) Simulator training is recommended to be part of the steep approach training program.
- (2) Where simulator training is included in the steep approach training program:
 - (a) The simulator shall be an approved full flight simulator (FFS) qualified to Level C or higher, and be aircraft type specific (to match the aircraft type planned for the approach operations).
 - (b) If the simulator includes a TCCA validated approach for the *Salluit, QC (CYZG) RNAV (GNSS) X RWY 03 Steep Approach*, there is no requirement for aircraft flight training at Salluit airport.
 - (c) If the simulator can only create a “generic” 4.8 degree steep approach, then aircraft flight training is required.

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:



Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - SALLUIT - RNAV (GNSS) X - RWY 03 PROCÉDURES AUX INSTRUMENT - RCAP - PISTE 03 DE L'AÉROPORT SALLUIT - APPROCHES RNAV (GNSS) X	704.08(g) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS CONDITIONS ATTACHED CONDITIONS ATTACHÉES
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SA Conditions Statement:

The authority for **INSTRUMENT PROCEDURES - RCAP - SALLUIT - RNAV (GNSS) X - RWY 03** is granted subject to the following condition(s):

- (1) The air operator shall have established steep approach procedures in its Company Operations Manual for the guidance of its personnel;
- (2) The air operator shall have Standard Operational Procedures for steep approaches;
- (3) Flight Crew and flight dispatchers shall be trained and familiar with all of the conditions associated with this steep approach procedure;
- (4) Flight Crew shall be trained and current to fly steep approaches with a glide path angle of 4.8 degrees, specific to each aircraft type used for this approach;
- (5) The aircraft shall be certified and equipped to fly a glide path angle of 4.8 degrees;
- (6) The aircraft shall be operated in accordance with the limitations and procedures contained within the applicable approved Aircraft Flight Manual & Supplements that pertain to Steep Approaches and Landings; and
- (7) The PAPI system shall be in operation.



5.3.11 INSTRUMENT PROCEDURES - RCAP – SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - RNP AR PROCEDURES

Description:

- (1) Approval to conduct RNP AR Specialized Restricted Instrument Procedures as depicted in the Restricted Canada Air Pilot (RCAP).
- (2) Previously known as:
 - (a) *“Operations Specification 605 – SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES RNP AR”.*

Requirements:

Subpart	604	702	703	704	705
CAR	604.52	702.08(g)(ii)	703.08(g)(ii)	704.08(g)(ii)	705.08(g)(ii)
CASS	--				
DOC(s)					

Guidance for Issuance:

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - RNP AR PROCEDURES PROCÉDURES AUX INSTRUMENT - RCAP - PROCÉDURES AUX INSTRUMENTS RESTREINTES SPÉCIALISÉES PROCÉDURES - RNP AR	705.08(g) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.12 INSTRUMENT PROCEDURES - RCAP – SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - HELICOPTERS

Description:

- (1) This Special Authorization permits the operator to conduct Helicopter ONLY Restricted Instrument Procedures, as detailed in the Restricted Canada Air Pilot (RCAP).
- (2) Previously known as:
 - (a) *“Operations Specification 606 – Helicopter-only restricted instrument procedures (RIP)”*.

Requirements:

Subpart	604	702	703	704	705
CAR	604.52	702.08(g)(ii)	703.08(g)(ii)	704.08(g)(ii)	N/A
CASS	--				N/A
DOC(s)					

Guidance for Issuance:

COM Amendment:

- (3) COM amended to reflect the requirements of conducting Restricted Instrument Procedures.

Training Program Amendment:

- (1) Pilot Training Program amended to ensure all requirements to conduct Restricted Instrument Procedures are complete.

Simulator Training

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as required to complete instrument approaches to be flown as described in the Restricted Canada Air Pilot.

Aircraft Inspection

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - HELICOPTERS PROCÉDURES AUX INSTRUMENT - RCAP - PROCÉDURES AUX INSTRUMENTS RESTREINTES SPÉCIALISÉES - HÉLICOPTÈRES	703.08(g) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.13 INSTRUMENT PROCEDURES - RCAP – STANDARD RESTRICTED INSTRUMENT PROCEDURES

Description:

- (1) Approval to conduct the standard restricted instrument procedures in the Restricted Canada Air Pilot (RCAP).
- (2) Previously known as:
 - (a) *“Operations Specification 410 – RESTRICTED INSTRUMENT PROCEDURES (RIP)” (604).*
 - (b) *“Operations Specification 099 – RESTRICTED INSTRUMENT PROCEDURES (RIP)” (700).*

Requirements:

Subpart	604	702	703	704	705
CAR	604.52	702.08(g)(ii)	703.08(g)(ii)	704.08(g)(ii)	705.08(g)(ii)
CASS	--				
DOC(s)					

Guidance for Issuance:

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INSTRUMENT PROCEDURES - RCAP - STANDARD RESTRICTED INSTRUMENT PROCEDURES PROCÉDURES AUX INSTRUMENT - RCAP - PROCÉDURES AUX INSTRUMENTS RESTREINTES STANDARD	705.08(g) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.14 Land and Hold Short Operations (LAHSO)

Description:

- (1) Approval for the air operator to conduct Land and Hold Short Operations (LAHSO) outside of Canada, provided that the provisions of this authorization, and the provisions of the foreign authorization that validates this document when operating within the country from which it was issued, are met.
- (2) Previously known as:
 - (a) “Operations Specification 617 – Land and Hold Short Operations”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	704.08(g)(i), 704.08(g)(xi)	705.08(g)(i), 705.08(g)(xi)
CASS	--	N/A	N/A		
DOC(s)	AC 700-050				

Guidance for Issuance:

Note: See AC 700-050 for specific guidance information

COM Content:

- (1) To include Operational Procedures related to LAHSO

Training Program Content:

Aircraft Performance:

Aircraft Equipment:

NACIS Guidance:

- (1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “**Compliance with provisions of the foreign authorization is required when operating in that country.**”

Example as Depicted in the Operations Specifications:

LAHSO	705.08(g)(i) & 705.08(g)(xi)	Compliance with provisions of the foreign authorization is required when operating in that country. Respect des dispositions de l'autorisation étrangère est requis lors de l'exploitation dans ce pays.	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.3.15 SIMULTANEOUS OPERATIONS IFR APPROACHES - GLS/ILS/LDA/RNAV PRM AND SOIA

Description:

- (1) Approval to conduct simultaneous operations IFR approaches for parallel or near parallel runways served by:
 - (a) Simultaneous close parallel PRM approaches, with distances between runway centerlines of 4300' down to 3000'.
 - i. Approaches for both runways can be GLS PRM, ILS PRM, or RNAV (GPS) PRM procedures.
 - (b) Simultaneous Offset Instrument Approaches (SOIA), with distances between runway centerlines of less than 3000' down to 750'.
 - i. Approaches for one runway must be an ILS PRM, while the other runway can be served by a GLS PRM, LDA PRM, LDA PRM DME, or RNAV (GPS) PRM procedure.
- (2) This approval is not required for Canada. However, the FAA requires this authority.
 - (a) This authority is issued on request by a Canadian operator, and is based on the operator complying with FAA requirements.

Note: FAA requirements for simultaneous close parallel approach operations can be found in FAA OpSpec C052.
- (3) Previously known as:
 - (a) *"Operations Specification 602 - Simultaneous Operations on Parallel or Near Parallel Instrument Runways- ILS/Precision Runway Monitor (PRM) and Localizer Type Directional Aid (LDA)PRM– Simultaneous Offset Instrument Approaches (SOIA)"*.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.08(g)(ii)	704.08(g)(ii)	705.08(g)(ii)
CASS	--	N/A			
DOC(s)	FAA AIM Section 5-4-16; FAA 8900.1, Volume 3, Chapter 18 - OpSpec/MSpec/LOA C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima —All Airports.				

Guidance for Issuance:

Note: See FAA 8900.1, Volume 3, Chapter 18 - OpSpec/MSpec/LOA C052, section A, 6), c), 2 for specific guidance information for meeting the FAA requirements.

COM Content:

- (1) The operator shall develop procedures in its company operations manual for the guidance of its personnel.

SOPs Developed / Amended:

Training Program Content:

- (1) Training materials shall include:
 - (a) the published PRM and SOIA approach charts; and



- (b) the FAA slide presentation, "Precision Runway Monitor (PRM) Pilot Procedures", available at:

https://www.faa.gov/training_testing/training/prm/

Note: The current FAA-produced and approved ILS PRM video entitled "ILS/PRM Approach for General Aviation" is recommended as supplemental information, available at:

<https://www.faa.gov/tv/?mediaid=230>

- (2) The training shall be conducted in accordance with the procedures established in the air operator company operations manual.
- (3) Initial Ground Training:
- (a) An air operator shall provide initial ground training to its flight crew members on the following procedures:
 - i. PRM approaches, and
 - ii. SOIA;
 - (b) Before PRM or SOIA approaches may be carried out, each flight crew member shall have completed the initial ground training.
- (4) Recurrent Ground Training:
- (a) An air operator shall provide recurrent ground training to its flight crew members by providing a review of the initial ground training elements and the slide presentation referred to in paragraph (1)(b), above.

Simulator Training:

- (1) Each flight crew member shall complete:
- (a) a PRM or a SOIA approach with a climbing or descending breakout manoeuvre under the supervision of an instructor, training pilot or a check pilot; and
 - (b) The training shall be completed within 12 months from the date of approval of the operators PRM/SOIA training program.

Aircraft Equipment:

- (1) The aircraft shall be equipped with two independent very high frequency (VHF) communications radios.

Aircraft Inspection:

Background Information:

Note: See FAA AIM section 5-4-16 for background information on Simultaneous Close Parallel ILS PRM/RNAV PRM/GLS PRM Approaches and Simultaneous Offset Instrument Approaches (SOIA).

Introduction

- (a) Precision Runway Monitor (PRM) equipment and procedures enable simultaneous independent approaches to be made in instrument meteorological conditions (IMC) to parallel or near-parallel runways whose centerlines are spaced less than 4,300 ft apart.

Note: PRM is a term used to describe a method by which an air traffic controller who monitors aircraft making an approach to land uses suitable secondary surveillance radar equipment with a minimum azimuth accuracy of 0.06 degrees (one sigma), an update period of 2.5 seconds or less, and a high resolution display that provides position prediction and deviation alert.



- (b) PRM approaches differ from conventional arrivals insofar as the flight crew must comply with specific procedures that will ensure the receipt of uninterrupted communications from the PRM monitor controller and know how they must respond to any avoidance instructions they may be given. Approval to fly PRM approaches will be issued by the State of the Operator only when satisfied that all required training in the use of these specific procedures has been given.

Note: Reference documents include: *Procedures for Air Navigation Services – Air Traffic Management, (PANS-ATM, Doc 4444), Chapter 6 – Visual Separation in the Vicinity of Aerodromes, Section 6.7 – Operations on Parallel or Near-Parallel Runways, and Chapter 12 – Phraseologies; and to ICAO PANS-OPS (Doc 8168-OPS/611) – Procedures for Air Navigation Services, Volume I – Flight Procedures, Part VII – Simultaneous Operations on Parallel or Near-Parallel Instrument Runways.*

General

- (a) The design specification of radar commonly used to monitor aircraft making their approach to land, including the display resolution and functionality, limits the minimum lateral distance at which two aircraft can fly *independent* parallel approaches to runways whose centerlines are more than 4,300 ft apart. Where runway centerlines are less than 4,300 ft apart, and PRM is not available, approaches must be *dependent* – that is to say the controllers must maintain a minimum along-track spacing, or stagger, between aircraft on the adjacent ILS localizer course and/or MLS final approach track. The position of the first (or leading) aircraft affects what the controllers can do with the second (or trailing) aircraft: this restricts aerodrome capacity and increases the controllers' workload.
- (b) PRM ground equipment includes radar that updates once per second, almost five times as fast as conventional aerodrome surveillance radar. This high update-rate radar has magnified displays, future-position predictive software, and visual and aural alerts, which together significantly improve the controllers' ability to monitor traffic on final approach. Because the radar updates so often, the controllers see a set of target trails that provide extremely accurate trend information. The automatic alerting function will issue cautions and warnings designed to assist the controllers to identify any potential conflict between aircraft and so issue appropriate instructions to either or both crews. During PRM operations, a separate controller monitors the traffic approaching each runway, ensuring that the required lateral separation between aircraft on final approach is maintained.
- (c) These features and procedures allow aircraft to fly independent approaches in IMC where the parallel or near-parallel runway centerlines are between 4,300 ft and 3,400 ft apart and each ILS localizer course or MLS final approach track is aligned with its respective runway centerline. Independent approaches in IMC may also be flown where the runway centerlines are between 3,400 ft and 3,000 ft apart provided that one of the ILS localizer courses and/or MLS final approach tracks leading to the threshold is offset from the other by between 2.5 and 3 degrees. PRM procedures will therefore restore some lost air traffic movement capacity, reducing delays, fuel consumption, and environmental impact.

Pre-Descent/Arrival Briefings

- (a) Briefings given before arrival at an aerodrome where PRM approaches can be expected or are known to be in use should address all of the topics described in the paragraphs that follow as are relevant in the circumstances.

Automated Terminal Information System (ATIS)

- (a) Aerodrome ATIS broadcasts should state when PRM approaches are being provided. If any aircraft and its crew are unable or unwilling to carry out a PRM approach (equipment



deficiency, not approved, not acceptable to the pilot-in-command, etc.), they should inform air traffic control at the earliest opportunity.

- (b) PRM approaches may be suspended under certain weather conditions that could include: windshear, turbulence, downdrafts, crosswinds and severe weather (such as thunderstorms), which might otherwise increase ILS localizer course or MLS final approach track deviations to the extent that safety might be impaired. ATIS may give notice of PRM approach suspension.

Approach Charts

- (a) Flight crews should refer to the appropriate PRM approach chart for the aerodrome of intended landing, noting that this may not be the same as for non-PRM approaches. PRM approaches require that additional information be provided, including the monitor frequency and any special requirements and/or limitations that apply at that aerodrome.

Aircraft Equipment Requirements

- (a) The aircraft equipment must enable ILS or MLS signals to be displayed such that pilots can continuously follow the lateral and vertical guidance information presented.
- (b) At least two separate and serviceable means of receiving radio transmissions simultaneously from controllers must be available to the pilots of each aircraft when they are commencing a PRM approach.

Autopilot Coupled Approaches

- (a) With the aim of reducing the risk that an aircraft making an approach will fail to complete the turn on to the final approach course or, once established, will deviate from it, pilots should consider using the localizer and glide path capture functions before flying a fully-coupled approach.

Communications

- (a) To avoid blocked transmissions, each runway will be served by two frequencies, a primary and a secondary (or 'monitor') frequency. [The term 'frequency' used in this Document should be taken to include 'channel'.] The tower controller and the monitor controller can transmit on both frequencies, but the monitor controller will have the ability to override the tower controller's transmissions. Pilots are required to listen to both frequencies but will transmit only on the primary frequency. On the flight deck, receiver volume levels should be set at about the same for both frequencies so that incoming transmissions can be heard through one receiver if anything should interrupt messages received through the other (blocked transmissions, an open microphone, radio equipment failure, etc).
- (b) The point at which pilots should begin to listen to the monitor frequency as well as to the primary frequency will be as specified by the air traffic service provider and published in the related PRM approach chart.

Procedures Designed to Maintain Separation between Arriving Aircraft

- (a) To ensure adequate lateral separation between aircraft on adjacent localizer courses or final approach tracks, the PRM approach concept incorporates a no-transgression zone (NTZ) corridor of airspace at least 2,000 ft wide, equidistant between parallel or near-parallel runway centerlines. This zone is intended to act as a buffer between aircraft on approach. Aircraft will be vectored to intercept their respective ILS localizer courses or MLS final approach tracks with a minimum of 1,000 ft vertical separation. The NTZ begins at the point where the higher of the two aircraft intercepts its glide path and begins to descend, and the 1,000 ft vertical separation is lost. The task of the monitor controller is to ensure that no aircraft overshoots the turn onto the localizer course or final approach track or, after it has become established, takes up a track that will cause it to penetrate



the NTZ. If the controllers observe any of these errors, they will immediately issue instructions to correct the reduction in separation.

- (b) When an aircraft is observed to overshoot the turn on the ILS localizer course or MLS final approach track, or to continue on a track that - if not corrected - *will* penetrate the NTZ (but has not yet done so), the controllers will instruct that aircraft to return immediately to the correct course or track. The instructions are likely to be: *(Aircraft call sign) YOU HAVE CROSSED THE LOCALIZER (or MLS FINAL APPROACH TRACK). TURN LEFT (or RIGHT) IMMEDIATELY AND RETURN TO THE LOCALIZER (or MLS FINAL APPROACH TRACK).*
- (c) When an aircraft is observed *penetrating* the NTZ, defined as a 'blunder' (i.e. not responding to instructions given to return to the ILS localizer course or MLS final approach track), the controllers will instruct *the pilot of the aircraft on the adjacent* course or track to immediately turn and climb to an assigned heading and altitude in order to avoid the deviating aircraft. This manoeuvre is defined as a 'breakout', and its purpose is to direct the aircraft out of the approach stream. Exceptionally, and only where the air traffic controller considers the manoeuvre essential, the aircraft may be instructed to descend provided there is no other viable alternative and the manoeuvre will not cause the aircraft to descend below the minimum flight altitude.
- (d) Due to the nature of this 'breakout' manoeuvre, the pilot is expected to immediately initiate the turn, and climb or descend as appropriate. Any heading instruction will not exceed 45 degrees track difference with the ILS localizer course or MLS final approach track. Internationally, 'breakout' instructions are likely to be: *(Aircraft call sign) BREAKOUT ALERT, (aircraft call sign) TURN LEFT (or RIGHT) DEGREES (or HEADING) (three digits) IMMEDIATELY TO AVOID TRAFFIC [DEVIATING FROM ADJACENT APPROACH], CLIMB (or DESCEND) TO (altitude).*
- (e) The FAA is using the term "Traffic Alert" to initiate a breakout. Thus, in the United States, 'breakout' instructions are likely to be: *(Aircraft call sign) TRAFFIC ALERT, (aircraft call sign) TURN LEFT (or RIGHT) DEGREES (or HEADING) (three digits) IMMEDIATELY TO AVOID TRAFFIC [DEVIATING FROM ADJACENT APPROACH], CLIMB (or DESCEND) TO (altitude).*

Pilots must be aware of the terminology used in the State that they are flying in to initiate a breakout manoeuvre.

Breakouts

- (a) Pilots should keep an increased sense of awareness when conducting PRM approaches, so as to immediately act and respond to any 'breakout' instruction they may be given.
- (b) The probability is low that any aircraft will 'blunder' from its assigned ILS approach course or MLS final approach track and enter the NTZ, causing the monitor controller to issue 'breakout' instructions to the aircraft approaching on the adjacent ILS localizer course or MLS final approach track. However, because of the close proximity of the two localizer courses or final approach tracks, it is essential that pilots follow the 'breakout' instructions precisely and expeditiously. These instructions provide conflict resolution for the threatened aircraft, with the turn portion of the 'breakout' being the single most important element in achieving maximum protection.
- (c) A turn away from a 'blundering' aircraft should reduce the risk that an ACAS Resolution Advisory will be displayed. However, if an RA is received, this should also be followed.
- (d) If both an RA and a 'breakout' instruction are received, the pilot should always follow the RA (even if it differs from the monitor controller's climb/descent instruction) while complying with the turn portion of the breakout instruction. As soon as practicable after responding to an RA, flight crew should inform the controller of their manoeuvre.

Aircraft Handling



- (a) 'Blunders' are less likely to arise and 'breakout' instructions are less likely to be required when pilots pay close attention to the initial turn on to the ILS localizer course or MLS final approach track, ensuring that their aircraft does not fail to capture as intended. Lateral separation is less than normal when flying PRM approaches. For this reason, close monitoring of the flight path and a prompt response to controller instructions are especially important, as is strict compliance with any heading and speed constraints given to reduce the rate of closure.
- (b) Monitored Approach Course Corrections If a controller observes an aircraft deviating from the ILS localizer course or MLS final approach track, the pilot will be instructed to return to correct course or track. The pilot should initiate the correction without delay using whatever flight management system overrides will result in swift compliance with the instruction or, if this cannot be achieved, by disconnecting the auto-flight systems and performing the manoeuvre manually. Failure to respond in a timely manner could require the 'breakout' of an aircraft on the adjacent approach course.
- (c) Breakouts With regard to handling the 'breakout' manoeuvre, the fastest way to initiate an immediate turn and/or change in pitch angle is to do so manually, applying control wheel or side-stick inputs after disengaging the auto-flight systems as necessary. Subsequent actions should be to adjust the power and trim before re-engaging any flight management system. In some aircraft it will be necessary to disengage the auto-throttles. The rate-of-change algorithms built into the autopilot vertical or lateral flight path control selectors in many aircraft are unlikely to deliver the immediate response and change of flight path expected by a controller in a breakout manoeuvre.

Simultaneous Offset Instrument Approach Procedures

- (a) When PRM approach procedures are used at aerodromes where the parallel or near-parallel runway centerlines are between 3,000 ft and 750 ft apart, independent approaches may be designed using a procedure described as a Simultaneous Offset Instrument Approach (SOIA). SOIA geometry requires that the ILS localizer course or MLS final approach track serving one of the runways is offset and that the associated transmitter is displaced to one side of the runway. This approach also provides glide path information. The other runway is served by an in-line ILS or MLS.
- (b) In general, the arrangements described above for PRM approaches apply also to SOIA, but with these differences:
 - i. Aircraft flying adjacent in-line and offset approaches are paired by ATC such that the aircraft flying the offset approach trails the aircraft flying the in-line approach. The transmitter of the offset localizer course or final approach track positioned at one side of the runway it serves ensures that adequate lateral separation, which progressively reduces as the offset and in-line approaches converge, is provided between aircraft pairs. The position where this separation becomes 3,000 ft defines the Missed Approach Point (MAP) for the offset approach.
 - ii. The pilot of the aircraft flying the offset approach will be expected accomplish three tasks in order to proceed past the MAP with the intention of landing:
 - 1. visually acquire the aircraft ahead flying the in-line approach;
 - 2. report traffic in sight to ATC (noting that the controller may not acknowledge this transmission); and
 - 3. have the runway environment in sight.
 - iii. If the pilot does not comply with these requirements, a missed approach must be executed upon arrival at the MAP. After passing the MAP, separation between aircraft on adjacent approaches is by visual means only. When appropriate, the pilot flying the offset approach must adjust the aircraft flight path to align with the landing runway, and should aim to become stabilized by 500 ft above the



threshold elevation. This pilot then becomes responsible for maintaining visual separation from the aircraft ahead flying the adjacent in-line approach. Therefore, whilst aircraft may be flying in IMC during their descent towards the MAP, visual conditions must exist at and beyond that point.

Training

- (a) Operators should ensure that pilots and flight engineers are given appropriate training in PRM addressing all the topics described in this Document. Specific instructions appropriate to the type of aircraft flown should be given on handling and flight deck management techniques.
- (b) Use should be made of any suitable video, DVD, slideshow, etc intended to assist flight crew understanding of PRM approach procedures.
- (c) Pilots and flight engineers should practice PRM procedures in an aircraft or flight simulator suitable for the purpose before flying PRM approaches in IMC. Such experience should include: pre-descent/arrival briefing; use of PRM approach charts; joining the ILS approach course or MLS final approach track; transition to visual approach associated with SOIA; response to controller instructions to correct a 'blunder'; and the correct response to 'breakout' instructions both with and without an ACAS RA.
- (d) Training programs are expected to include:
 - i. Precision Runway Monitor (PRM) operations:
 - 1. viewing the FAA slide presentation, "Precision Runway Monitor (PRM) Pilot Procedures";
 - 2. the PRM system including "no transgression zones";
 - 3. the proximity of other aircraft flying on the adjacent approach path;
 - 4. the use of Automatic Terminal Information Service (ATIS) to advise when PRM or SOIA operations are in progress;
 - 5. the differences between ILS/PRM approach plates and normal ILS approach plates, including the special instruction pages for ILS/PRM;
 - 6. the unique communications requirements (equipment and procedures) for PRM and SOIA operations;
 - 7. the meaning of the term "breakout" and the requirement to immediately comply with a breakout instruction;
 - 8. ICAO and FAA terminology differences to initiate a "breakout" – "Breakout Alert" versus "Traffic Alert".
 - 9. the items found in the "Attention All Users Page": ATIS, Dual VHF Communications Required, and All "Breakouts", "For Consideration"; and
 - 10. normal usage of Traffic Alert and Collision Avoidance System (TCAS) during PRM operations, understanding, however, that an ATC breakout turn instruction is the primary means of conflict resolution during a PRM approach.
 - ii. SOIA operations:
 - 1. viewing the the FAA slide presentation, "Precision Runway Monitor (PRM) Pilot Procedures";
 - 2. the SOIA system including the differences from the PRM system;
 - 3. the approach course separation (instead of the runway separation) meets established parallel approach criteria;



4. the visual segment of the SOIA approach – permits the aircraft to transition in visual conditions from the instrument approach course to align with the runway and be stabilized by 500 feet above the touchdown zone elevation;
5. the flight crew responsibility to remain on the instrument approach course until passing the MAP prior to alignment with the runway centerline;
6. the conditions that the flight crew must meet in order to continue past the MAP, when ATC advises there is traffic on the adjacent ILS parallel approach course:
7. The ILS traffic is in sight and is expected to remain in sight, and ATC has been so advised;
8. The runway environment is in sight, or otherwise, a missed approach must be executed;
9. the responsibility of the flight crew to maintain visual separation from the traffic on the ILS approach, between the MAP and the runway threshold. Which means manoeuvring the aircraft as necessary to avoid the ILS traffic until landing and providing wake turbulence avoidance, if applicable;
10. procedures required in the event that visual contact is lost with the ILS traffic; and,
11. the requirement for the GLS/LDA/RNAV aircraft to be the trailing aircraft.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

SIMULTANEOUS OPERATIONS IFR APPROACHES - GLS/ILS/LDA/RNAV PRM AND SOIA OPÉRATIONS SIMULTANÉES D'APPROCHES IFR - GLS/ILS/LDA/RNAV ET SOIA	705.08(g) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS CONDITIONS ATTACHED CONDITIONS ATTACHÉES
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SA Conditions Statement:

The authority for **SIMULTANEOUS OPERATIONS IFR APPROACHES – GLS/ILS/LDA/RNAV PRM AND SOIA** is granted subject to the following conditions:

COM Content

- (1) The operator shall develop procedures in its company operations manual for the guidance of its personnel.

Training Program Content

- (2) Training materials shall include:
 - (a) The published PRM and SOIA approach charts; and
 - (b) The FAA slide presentation, "Precision Runway Monitor (PRM) Pilot Procedures".
- (3) The training shall be conducted in accordance with the procedures established in the air operator company operations manual.
- (4) An air operator shall provide initial ground training to its flight crew members on the following procedures:
 - (a) PRM approaches; and



(b) SOIA.

- (5) *Before PRM or SOIA approaches may be carried out, each flight crew member shall have completed the initial ground training.*
- (6) *An air operator shall provide recurrent ground training to its flight crew members that includes a review of the ground training elements and the video referred to in paragraph (2)(b) above.*

Simulator Training

- (7) *Each flight crew member shall complete:*
- (a) *A PRM or a SOIA approach with a climbing or descending breakout manoeuvre under the supervision of an instructor, training pilot or a check pilot; and*
 - (b) *The training shall be completed within 12 months from the date of approval of the operators PRM/SOIA training program.*

Aircraft Equipment

- (8) *The aircraft shall be equipped with two independent very high frequency (VHF) communications radios.*



5.4 LOW VISIBILITY OPERATIONS – Take-off



5.4.1 TAKE-OFF IN IMC – WEATHER BELOW LANDING MINIMA

Description:

- (1) Approval to conduct a take-off in instrument meteorological conditions (IMC), with weather below the Landing Minima specified in the CAP.
- (2) Previously known as:
 - (a) “Operations Specification 006 – Take-Off in IMC – Weather Below Landing Minima” (703).
 - (b) “Operations Specification 021 – Take-Off in IMC – Weather Below Landing Minima” (704).

Requirements:

Subpart	604*	702	703	704	705
CAR	604.74	N/A	703.30(1)	704.26(1)	N/A
CASS	723.30(1)	N/A	723.30(1)	724.26(1)	N/A
DOC(s)					

* 604 authorization is pursuant to the operator adhering to the standards set out in CASS 723.30(1)

Guidance for Issuance:

COM Content:

Background Information:

- (1) By specifying a take-off alternate, an aircraft can depart when the weather conditions are above take off minima but below landing minima for the runway in use.
- (2) Depending on the number of passengers being carried the air operator has two options:
 - (a) when carrying 9 or fewer passengers, then the take-off alternate must be within 60 minutes or 120 minutes (depending on the number of engines) *at normal cruising speed*.
 - (b) when carrying 10 or more passengers, then the take-off alternate must be within 60 minutes or 120 minutes (depending on the number of engines) *at one engine inoperative cruise speed*.

Note: An infants is not counted as a passenger when carried on the lap of an accompanying adult. When in a child restraint system, an infant is counted as a passenger.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

TAKE-OFF IN IMC - WEATHER BELOW LANDING MINIMA DÉCOLLAGE EN IMC – CONDITIONS MÉTÉOROLOGIQUES INFÉRIEURES AUX MINIMUMS DE DÉCOLLAGE	703.30(1) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.2 TAKE-OFF MINIMA – REPORTED VISIBILITY BELOW RVR 600' DOWN TO AND INCLUDING RVR 300'

Description:

- (1) Approval to conduct a take-off with reported visibility below RVR 600' down to and including RVR 300'.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	N/A	N/A	N/A	705.08(g)(iv)
CASS		N/A	N/A	N/A	
DOC(s)	AC 700-035				

Guidance for Issuance:

Note: See AC 700-035 for specific guidance information

COM Content:

Training Program Content:

Simulator Training:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
- (a) For this SA, there is only one option:
- i. “RVR 300 ft(75m)”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY BELOW RVR 600' DOWN TO AND INCLUDING RVR 300' MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE INFÉRIEURE À 600 PI ET JUSQU'À 300 PI	705.08(g) (iv)	RVR 300 ft(75m) RVR 300 pi(75m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.3 TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 600' - AEROPLANES

Description:

- (1) Approval to conduct a take-off with reported visibility RVR 600' for Aeroplanes.
- (2) Previously known as:
 - (a) “Operations Specification 403 - Take-Off Minima, Reported Visibility RVR 600'” (604).
 - (b) “Operations Specification 024 - Take-Off Minima, Reported Visibility RVR 600'” (704).
 - (c) “Operations Specification 063 - Take-Off Minima, Reported Visibility RVR 600'” (705).

Requirements:

Subpart	604	702	703	704	705
CAR	604.49(b)	N/A	N/A	704.26(3)	705.34(3)
CASS	--	N/A	N/A	724.26(2)	725.34(2)
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Simulator Training:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “RVR 600 ft(175m)”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE DE 600 PI – AVIONS	705.34(3) (a)	RVR 600 ft(175m) RVR 600 pi(175m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.4 TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 600' - HELICOPTERS

Description:

- (1) This SA permits the operator to conduct take-offs when weather conditions are below the take-off minima specified in the instrument approach procedure, but visibilities are at least RVR 600'.
- (2) Previously known as:
 - (a) “Operations Specification 403 – Take-Off Minima, Reported RVR 600’” (604).
 - (b) “Operations Specification 014 – Take-Off Minima, Reported RVR 600’ – Helicopters” (703).
 - (c) “Operations Specification 024 – Take-Off Minima, Reported RVR 600’” (704).

Requirements:

Subpart	604	702	703	704	705
CAR	604.49(b)	N/A	703.30(3)	704.26(3)	N/A
CASS	--	N/A	H723.30(2)	H724.26(2)	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) to reflect the requirements of CASS 723.30(2)(a) or CASS 724.26(2)(a)

Training Program Content:

- (1) to meet the requirements of CASS 723.30(2)(e) or CASS 724.26(2)(e)

Simulator Training:

Aircraft Equipment:

- (1) The helicopter must be multi-engine and satisfy the requirements of CASS 723.30(2)(d) or 724.26(2)(d). Private Operators are to follow the requirements set out in CAR 604.49(b).
- (2) Ensure the helicopter is capable of the requirements detailed in CASS 723.30(2)(a) or 724.26(2)(a).

Aircraft Inspection:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “RVR 600 ft(175m)”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - HELICOPTERS MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE DE 600 PI – HÉLICOPTÈRES	704.26(3) (a)	RVR 600 ft(175m) RVR 600 pi(175m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.5 TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (1/4 MILE)

Description:

- (1) Approval to conduct a take-off with reported visibility of RVR 1,200' (1/4 mile).
- (2) Previously known as:
 - (a) “Operations Specification 404 - Take-Off Minima Reported Visibility RVR 1,200' (1/4 mile)” (604).
 - (b) “Operations Specification 062 - Take-Off Minima Reported Visibility RVR 1,200' (1/4 mile)” (705).

Requirements:

Subpart	604	702	703	704	705
CAR	604.49(a)	N/A	N/A	N/A	705.34(3)
CASS	--	N/A	N/A	N/A	725.34(1)
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Simulator Training:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “RVR 1200 ft(350m)”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (1/4 MILE) MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE DE 1200 PI – (1/4 DE MILLE)	705.34(3) (a)	RVR 1200 ft(350m) RVR 1200 pi(350m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.6 TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)

Description:

- (1) Approval to conduct a take-off with reported visibility RVR 1,200' (1/4 mile), where the aircraft has certified engine-out take-off and climb performance.
- (2) Previously known as:
 - (a) *“Operations Specification 055 – Take-Off Minima Reported Visibility RVR 1,200' (1/4 Mile) - Aeroplanes with Certified Engine-Out Take-Off and Climb performance” (702).*
 - (b) *“Operations Specification 007 – Take-Off Minima Reported Visibility RVR 1,200' (1/4 Mile) - Aeroplanes with Certified Engine-Out Take-Off and Climb Performance” (703).*
 - (c) *“Operations Specification 022 – Take-Off Minima Reported RVR 1,200' (1/4 mile) Visibility- Aeroplanes With Certified Engine-Out Take-Off and Climb Performance” (704).*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.08(g)(v)	703.30(3)	704.26(3)	N/A
CASS	--	722.08(4)	723.30(2)(a)	A724.26(2)(a)	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

Background Information:

- (1) Beech 200 Series aircraft may utilize this SA, subject to the following conditions:
 - (a) Tailwind takeoffs are prohibited.
 - (b) Headwind components shall not be considered for obstacle clearance purposes.
Note: Surface winds may be used for both (a) and (b).
 - (c) Where the departure includes heading changes of more than 15 degrees below 1500 feet Above Ground Level (AGL), the operator shall reduce the reported zero wind climb performance as follows (compensation for a possible downwind turn following a crosswind takeoff):
Note: Performance reduction applies from the start of the turn.
 - i. For turns from 16 to 45 degrees, subtract 0.5 percent;
 - ii. For turns from 46 to 90 degrees, subtract 1.0 percent;
 - iii. For turns from 91 to 135 degrees, subtract 1.5 percent; and



- iv. For turns from 136 to 180 degrees, subtract 2.0 percent.

NACIS Guidance:

- (1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.
- (a) For this SA, there is only one option:
- i. “**RVR 1200 ft(350m)**”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE) MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE DE 1200 PI (AVEC PERFORMANCES HOMOLOGUÉES POUR UN DÉCOLLAGE AVEC MOTEUR EN PANNE)	704.26(3) (a)	RVR 1200 ft(350m) RVR 1200 pi(350m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.4.7 TAKE-OFF MINIMA – REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)

Description:

- (1) Approval to conduct a take-off with reported visibility RVR 1,200' where the aircraft does not have certified engine-out take-off performance.
- (2) Previously known as:
 - (a) *“Operations Specification 058 - Take-off Minima Reported Visibility RVR 1,200' (1/4 Mile) Aeroplanes Without Certified Engine-out take-off and Climb Performance” (702).*
 - (b) *“Operations Specification 008 - Take-Off Minima Reported Visibility RVR 1,200' (1/4 mile) - Aeroplanes Without Certified Engine-Out Take-Off and Climb Performance” (703).*
 - (c) *“Operations Specification 023 - Take-Off Minima Reported RVR 1,200' (1/4 mile) Visibility - Aeroplanes Without Certified Engine-Out Take-Off and Climb Performance” (704).*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.08(g)(ii)	703.30(3)	704.26(3)	N/A
CASS	--	722.08(5)	723.30(2)(b)	724.26(2)(b)	N/A
DOCS					

Guidance for Issuance:

COM Content:

Training Program Content:

Simulator Training:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “RVR 1200 ft(350m)”.

Example as Depicted in the Operations Specifications:

TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE) MINIMUMS DE DÉCOLLAGE – VISIBILITÉ RVR SIGNALÉE DE 1200 PI (SANS PERFORMANCES HOMOLOGUÉES POUR UN DÉCOLLAGE AVEC MOTEUR EN PANNE)	704.26(3) (a)	RVR 1200 ft(350m) RVR 1200 pi(350m)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.5 LOW VISIBILITY OPERATIONS – Operational Credits



5.5.1 CATEGORY I - II - III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES

Description:

- (1) Approval to use a Head up Display (HUD) certified aircraft to conduct approach operations to Category I, II or III minimums.

Note: HUDs certified to conduct approach operations to Category I, II or III minimums may be referred to as a Head Up Guidance Systems (HGS) by some manufacturers.

- (2) Previously known as:

- (a) “Operations Specification 059 - Category (CAT) I, II, & III Approach Operations using a Head up Display (HUD)”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.08(g)(i)&(ii)
CASS	--	N/A	N/A	N/A	
DOC(s)	TP 1490				

Guidance for Issuance:

Note: Detailed requirements are provided in **SA Conditions Statement**, below.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Simulator Training:

Aircraft Equipment:

- (1) The HUD (HGS) equipment and installation shall be type certified in accordance with the appropriate requirements of Part V of the Canadian Aviation Regulations.

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

CATEGORY I - II - III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES APPROCHES DE CATÉGORIE I, II, III UTILISANT LE DISPOSITIF DE VISUALISATION TÊTE HAUTE (HUD) – AVIONS	705.08(g)(i)&(ii)		ALL AIRCRAFT TOUS LES AÉRONEFS CONDITIONS ATTACHED CONDITIONS ATTACHÉES
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SA Conditions Statement:

The authority for **CATEGORY I – II – III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES** is granted subject to the following conditions:

- (1) The air operator shall develop procedures in its company operations manual for the guidance of its personnel, including:
- (a) normal procedures for all phases of flight during which the HUD will be used;



- (b) *abnormal procedures; and,*
- (c) *emergency procedures.*

Note: *These shall include the crew standard operating procedures; and duties and responsibilities that are specific to each crew position.*

- (2) *The air operator shall maintain a HUD qualification record for each flight crew member who occupies a position that is equipped with a HUD.*

Ground Training

- (3) *The air operator shall provide initial ground training to its flight crew members; including:*
 - (a) *system description and characteristics;*
 - (b) *HUD symbology and inter-relationship with aeroplane aerodynamics and environmental conditions;*
 - (c) *AFM System limitations;*
 - (d) *normal, abnormal and emergency operation of the HUD system;*
 - (e) *HUD symbology and warnings for conditions such as wind shear, TCAS, terrain avoidance, etc.;*
 - (f) *aircraft and Navigation system failures affecting HUD operation; and,*
 - (g) *crew standard operating procedures, duties and responsibilities.*
- (4) *Recurrent ground training shall be conducted annually, including:*
 - (a) *review of HUD system and normal operation;*
 - (b) *review of HUD operating limitations; and,*
 - (c) *review of selected abnormal and emergency procedures.*
- (5) *This training shall be conducted in accordance with the procedures established in the air operator company operations manual.*

Initial Simulator Training

- (6) *The air operator shall provide initial simulator training to its flight crew members; including:*
 - (a) *HUD Equipment checks;*
 - (b) *HUD set up on the ground and in flight;*
 - (c) *demonstration of failures and incorrect settings on approach such as runway elevation, airspeed, selected decision height, etc.;*
 - (d) *procedures and duties specific to each crew position;*
 - (e) *operation of the aeroplane using the HUD in all phases of flight and weather conditions for which:*
 - i. *the air operator is certified in its air operator certificate; and,*
 - ii. *the HUD system is certified in the AFM;*
 - (f) *in-flight manoeuvres to include steep turns, approach to stall recovery and unusual attitude recovery;*
 - (g) *normal take-off and low visibility take-off at the lowest authorized RVR;*
 - (h) *take-off with engine failure at V1 and a take-off with an engine failure prior to V1 leading to a rejected take-off;*



- (i) *approaches using the appropriate flight guidance, autopilots and control systems installed in the aeroplane, to the appropriate minimums and transition to landing;*
 - (j) *normal, crosswind and engine out landings as applicable to AFM limitations;*
 - (k) *use of center-line guidance during take-off, landings and rejected take-offs;*
 - (l) *in-flight procedures for TCAS resolution advisory, wind shear and terrain avoidance using the HUD;*
 - (m) *approaches with system failures such as HUD system, navigation system, avionics system, electrical system, autopilot system, and engine failure;*
 - (n) *rejected landings and Missed Approaches due to lack of visual reference at the lowest authorized decision height or minimum descent altitude; and,*
 - (o) *pilot incapacitation procedures applicable to low visibility take-off and CAT II and CAT III approaches if authorized in the air operator certificate.*
- (7) *Before CAT I, II, and/or III approach operations using a HUD may be carried out, each flight crew member shall have completed the initial ground training and initial simulator training; and,*
- (8) *This training shall be conducted in accordance with the procedures established in the air operator company operations manual.*

Recurrent Simulator Training

- (9) *Each flight crew member shall complete recurrent CAT I, II, and/or III approach operations training using a HUD, under the supervision of an instructor, training pilot, check pilot or Type V Evaluator. This training shall be completed as part of the recurrent training or as part of the continuing qualification curriculum, as applicable, for each flight crew member authorized to conduct CAT I, II, and/or III approach operations using a HUD, including:*
- (a) *approach and landing at the lowest authorized minima;*
 - (b) *take-off at the lowest authorized minima;*
 - (c) *take-off with engine failure at V1;*
 - (d) *rejected take-off;*
 - (e) *missed Approach;*
 - (f) *non-precision approach if applicable to the air operator's operation; and,*
 - (g) *selected abnormal and emergency procedures.*

HUD Consolidation Training

- (10) *Each flight crew member who occupies a position that is equipped with a HUD, shall complete the HUD Consolidation Training requirements of subparagraph (a) and, where applicable, the requirements of subparagraphs (b), (c) or (d), after successful completion of their initial HUD qualification:*
- (a) *A minimum of 3 HUD assisted take-offs, 3 manually flown instrument approach procedures and landings, and one visual approach and landing shall be conducted in the aircraft while using the HUD, under the supervision of a line qualified training or check pilot. The HUD assisted take-offs and the instrument approaches to landings must be completed in reported weather conditions that are not lower than the take-off weather minima specified in the Canada Air Pilot instrument procedure or equivalent foreign publication, and not lower than the published CAT I approach minima, respectively;*
 - (b) *Before a flight crew member may conduct a HUD assisted take-off in reported weather conditions below the minimums described in (a) above and subject to the authorization of the air operator in its air operator certificate, a minimum of 15 take-offs, including those in*



- (a) above, must be completed in the aircraft while using the HUD, in reported weather conditions at or above the take-off minima specified in the instrument procedure;*
- (c) Before a flight crew member may be authorized to conduct manually flown CAT II or III operations using the HUD and subject to the authorization of the air operator in its air operator certificate, a minimum of 15 manually flown CAT I ILS approaches and/or simulated CAT II or III approaches, including those in (a) above, in reported weather conditions that are not lower than the published CAT I approach minima, must be completed in the aircraft using the HUD. Each approach may be conducted on a CAT I ILS installation that meets the AFM requirements and has been assessed as operationally suitable by the air operator. Each approach must terminate in a manually controlled HGS assisted landing or HGS assisted go-around; and*
- (d) Notwithstanding the requirement of (c) above, where a flight crew member who occupies a position that is equipped with a HUD has completed a minimum of 5 approaches and landings using the HUD, that flight crew member may conduct instrument approaches to CAT II or III minima, provided they are conducted using the auto-land system, and each flight crew member has been authorized by the air operator for the applicable category of operations in their respective positions.*
- (11) Following completion of HUD consolidation, each flight crew member who occupies a position that is equipped with a HUD shall be considered qualified for HUD operation. This qualification shall be indicated in each flight crew member's HUD qualification record.*
- (12) The HUD equipment and installation shall be certified in accordance with the appropriate requirements of Part V of the Canadian Aviation Regulations.*



5.6 REDUCED VERTICAL SEPARATION MINIMA



5.6.1 Reduced Vertical Separation Minima (RVSM)

Description:

- (1) Approval to conduct operations in RVSM airspace, spanning FL 290 to FL 410 in Canadian domestic airspace.

Requirements:

Subpart	604	702	703	704	705
CAR	604.56	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(2)(d)	723.08(2)(d)	724.08(2)(d)	725.08(2)(d)
DOC(s)	AC 700-039				

Guidance for Issuance:

Note: See AC 700-039 for specific guidance information

COM Content:

Training Program Content:

Aircraft Equipment:

- (1) All aircraft must meet RVSM Minimum Aircraft System Performance Specifications (MASPS) as defined in AC 700-039.

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

- (1) An applicant for an AOC or amendment of an existing AOC must demonstrate to the Minister that they have a maintenance control system defined within their MCM that ensure in-service RVSM integrity as defined in AC 700-039.

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) This approval is issued to the specific aircraft mark(s).
- (a) Be sure to specify the aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields.

Note: Where the operator has a large fleet, and volume of registration marks will be difficult to display in the SA. The use of the optional SA “**REGISTRATION MARKS**” is recommended.

If choosing this option:

- The free text field in the “**REMARKS**” section should include the statement “***Please see the included SA REGISTRATION MARKS for specific aircraft registrations associated with the Type Designator listed above***”; and
- The “**REGISTRATION MARKS**” SA will need to be completed.
 - See section 5.17.8



Note: There is no charge for the “**REGISTRATION MARKS**” SA, as it is being used to facilitate the issuance of this and other SA’s (i.e.; it is an administrative action by TCCA).

(2) Following the issuance of this SA, the inspector is required to send RVSM information to the RVSM mailbox (TC.RVSM.TC@tc.gc.ca).

(a) The information required for the RVSM addition of aircraft mark is detailed as:

- i. State of Registry of the aircraft;
- ii. Operator Legal Name and three-letter ICAO designator (if available);
- iii. State of Operator;
- iv. Aircraft Type Designator;
- v. Aircraft Mark (Registration);
- vi. Aircraft Mark (Series);
- vii. Manufacturer's Serial Number/construction number;
- viii. Aircraft Mode S Address Code (hexadecimal code format);
- ix. Airworthiness Approval Date or most recent Service Bulletin (SB) Date;
- x. Date of Airborne Flight Monitor (if available);
- xi. RVSM Approved; and
- xii. Expire Date (if applicable).

(b) For removal of an aircraft from the RVSM database (RDIMS# 11062078), the following information should be sent:

- i. Please remove aircraft, Reg. mark C-XXXX;
- ii. Serial no; and
- iii. Effective Date.

(c) Once received by HQ, the RVSM database is updated (bi-weekly).

(3) As detailed in AC 700-039, the SA may be issued as a temporary authority for 6 months, to allow the operator to meet height monitoring requirements.

Example as Depicted in the Operations Specifications:

RVSM	705.08(g) (vi)		AIRCRAFT / AÉRONEFS : E190 - EMBRAER ERJ190 100IGW: C-FHJU, C-FHKA, C-FHKE, C-FHKL, C-FHKP, C-FHNL, C-FHNP, C-FHNV, C-FHNW, C-FHOS, C-FHOY, C-FLWE, C-FLWH, C-FLWK, C-FMYV, C-FMZB, C-FMZD, C-FMZR, C-FMZU, C-FMZW, C-FNAI, C-FNAJ, C-FNAN, C-FNAP, C-FNAW
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5.7 EXTENDED DIVERSION TIME OPERATIONS



5.7.1 Extended Range Twin-Engine Operations (ETOPS)

Description:

- (1) Approval to conduct Extended Range Twin-Engine Operations (ETOPS).
- (2) The types of twin-engine aeroplanes indicated in this authorization may be flown, at the airspeed and for the time period referred to in of this authorization, on routes that contain a point that is farther from an adequate aerodrome than the distance that can be flown in 60 minutes at the one-engine-inoperative cruise speed.
- (3) This approval includes 75 minutes benign, 90, 120, 138, 180 and 207 or 240 minute maximum diversion times.
- (4) Previously known as:
 - (a) *“Operations Specifications 061 – Extended Range – Turbine Powered Twin-Engined Operations”*.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.26
CASS	--	N/A	N/A	N/A	725.124(36)
DOC(s)	TP 6327				

Guidance for Issuance:

Note: See TP 6327 for specific guidance information.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

- (1) All parts identified as required for ETOPS in the *Configuration, Maintenance and Procedures (CMP)* document shall be compliant with that document.
- (2) The aircraft requires an airworthiness certification covering ditching.

Note: If the aircraft is not certificated for ditching, extended flights over water should not be authorized.

Aircraft Inspection:

Maintenance Approval / Acceptance:

- (1) The Principal Maintenance Inspector (PMI) having jurisdiction over the operator must assess, over a period of not less than 3 months, the maintenance control system as being suitable to support the proposed ETOPS operation, before the operational approval for ETOPS can be granted.
- (2) IFSD rate calculation, engine trend monitoring, and reliability program must be documented in the MCM.

Maintenance Schedule Amendment:

Background Information:



- (1) The designated airspeed and the period of time referred, and where the word "Benign" appears following the time, it indicates that the approval is restricted to the benign areas of authorization in the Operations Manual.

NACIS Guidance:

- (1) This approval has to include threshold time and maximum diversion time.
 - (a) The **"DESCRIPTION"** section contains a pull-down field that must be selected for one of the following options:
 - i. **"Threshold Time: 60 mins Maximum Diversion Time: 75 mins Benign";**
 - ii. **"Threshold Time: 60 mins Maximum Diversion Time: 90 mins";**
 - iii. **"Threshold Time: 60 mins Maximum Diversion Time: 120 mins";**
 - iv. **"Threshold Time: 60 mins Maximum Diversion Time: 138 mins";**
 - v. **"Threshold Time: 60 mins Maximum Diversion Time: 180 mins";**
 - vi. **"Threshold Time: 60 mins Maximum Diversion Time: 207 mins";** or
 - vii. **"Threshold Time: 60 mins Maximum Diversion Time: 240 mins".**
 - (2) Where there are different limitations required for different aircraft, there are two options:
 - (a) The preferred option is to select the SA **"Extended Range Twin-Engined Operations (ETOPS)"**, choose the applicable aircraft in the **"Type Designator(s)"** and **"Registered Aircraft"** fields, and then select the appropriate limitations in the **"DESCRIPTION"** field drop-down list (i.e.; only one limitation is chosen).
 - i. If there are aircraft exclusions that need to be noted, add them to the **"REMARKS"** field using the free text option, noting the aircraft type and registration, and its limitation.

Note: Free text entries have limited character length. The option to use the SA **"REGISTRATION MARKS"**, can also be used (see section 3.2.5(6)a "Note", in this volume), where aircraft can be grouped into a make/model/series for each limitation.
 - (b) For operators that have large numbers of aircraft that can be grouped under multiple common limitations, each group of aircraft can be listed under a separate **"Extended Range Twin-Engined Operations (ETOPS)"** SA.
 - i. There are eight SA's containing the text **"Extended Range Twin-Engined Operations (ETOPS)"**; they are specifically labelled **"Extended Range Twin-Engined Operations (ETOPS)"**, **"Extended Range Twin-Engined Operations (ETOPS) #2"**, **"Extended Range Twin-Engined Operations (ETOPS) #3"**, etc.
 1. The first group of aircraft can be contained in the **"Extended Range Twin-Engined Operations (ETOPS)"** SA (as per (2)a., above), and the **"DESCRIPTION"** field should be selected for the first limitation.
 2. The second group of aircraft can be added to the second SA **"Extended Range Twin-Engined Operations (ETOPS) #2"**, and the **"DESCRIPTION"** field should contain the second limitation.
 3. **"Extended Range Twin-Engined Operations (ETOPS) #3"**, etc., can be used for other groups with other limitations (as required).
 4. Where aircraft groupings cannot contain enough detail within the eight possible SA's (each with a discrete limitation in the **"DESCRIPTION"** field), the exclusion methodology mentioned in (2)a.i., above, can also be used.



Example as Depicted in the Operations Specifications:

ETOPS	705.26(2) (b)	Threshold time: 60 mins Maximum Diversion Time: 240 mins Heure limite: 60 min Durée maximale de dérivation: 240 min	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8 NAVIGATION SPECIFICATIONS FOR PBN OPERATIONS



5.8.1 Aircraft Network Security Program (ANSP)

Description:

- (1) The need for ANSP is due to improvements in technologies in avionics data/information transfer which exceed or go beyond those captured under FAR 25.
- (2) An aircraft requiring an ANSP to operate can be identified by a SC listed on the Type Certificate Data Sheet (TCDS) or, if later modified, will be identified in the Supplemental Type Certificate (STC) or Amended Type Certificate (ATC) with a SC. In any of these cases, only SCs requiring instructions to an operator or operator action would mandate the requirement for an ANSP.

Requirements:

Subpart	604	702	703	704	705
CAR					705.08(g)(i)&(xi)
CASS					
DOC(s)	FAA AC 119-1 - Airworthiness and Operational Approval of Aircraft Network Security Program (ANSP)				

Guidance for Issuance:

Note: See FAA AC 119-1 for specific guidance. This AC provides a process for operators to obtain operational authorization for an aircraft certified with a special condition (SC) (SCAs in Canada).

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) This approval is issued to the specific aircraft mark(s).
 - (a) Be sure to specify the aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields.

Note: Where the operator has a large fleet, and volume of registration marks will be difficult to display in the SA. The use of the optional SA “**REGISTRATION MARKS**” is recommended.

If choosing this option:

1. The free text field in the “**REMARKS**” section should include the statement “***Please see the included SA REGISTRATION MARKS for specific aircraft registrations associated with the Type Designator listed above***”; and
2. The “**Registration Marks**” SA will need to be completed.
 - a. See section 5.17.8



Note: There is no charge for the “**REGISTRATION MARKS**” SA, as it is being used to facilitate the issuance of this or other SA’s (i.e.; it is an administrative action by TCCA).

Example as Depicted in the Operations Specifications:

ANSP DSNA	705.08(g) (xi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.2 Canadian Minimum Navigation Performance Specifications (CMNPS)

Description:

- (1) Approval to conduct operations in CMNPS airspace.
- (2) Canadian Minimum Navigation Performance Specifications (CMNPS) is part of Canada's high level controlled airspace encompassing airspace from FL 330 to FL 410 within the lateral dimensions of the Northern Control Area (NCA), the Arctic Control Area (ACA) and the northern part of the Southern Control Area (SCA). A CMNPS transition area exists between FL 270 to FL 330 within the same lateral boundaries.
 - (a) See TP 1820, map M7.
- (3) Separation minima are different from that of international airspace, and require aircraft to have specific navigation equipment and approvals to operate within this airspace (e.g. RNP/RVSM).
- (4) Previously known as:
 - (a) *"Operations Specifications 407 – Performance Airspace" (604).*
 - (b) *"Operations Specifications 037 – Performance Airspace" (704).*
 - (c) *"Operations Specifications 077 – Performance Airspace" (705).*

Requirements:

Subpart	604	702	703	704	705
CAR	604.53	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(2)	723.08(2)	724.08(2)	725.08(2)
DOC(s)	TP 1820 (M7), TP 14371 (RAC)				

Guidance for Issuance:

COM Content:

- (1) The operator must establish procedures in its COM for the guidance of its personnel and any other procedures related to CMNPS that may be necessary for safe operations. These procedures must include at least a system description; the normal, non-normal and/or contingency procedures of the system; the operational aspects of CMNPS operations and any effects or dependencies on other aircraft systems.

SOPs Developed / Amended:

Training Program Content:

- (1) The operator must provide initial and recurrent training to each flight crew member, operational control personnel (dispatchers), and maintenance personnel as applicable, involved with CMNPS.
- (2) This training must include at least the training elements of the appropriate CASS.

Aircraft Equipment:

- (1) The equipment and installation must meet the requirements of Part V of the Canadian Aviation Regulations; and

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:



Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

CMNPS	705.08(g) (vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.3 Area Navigation 1 and 2 (RNAV 1 AND 2)

Description:

- (1) This SA allows an operator to navigate using area navigation equipment, while not requiring that equipment to have on-board monitoring and alerting functionality.
- (2) Operations using RNAV 1 and 2 include:
 - (a) all routes, inside or outside of controlled airspace;
 - (b) SIDs and STARs: and
 - (c) IAP leg segments up to the FACP.
- (3) RNAV 1 and RNAV 2 routes are expected to be conducted in a surveillance environment with Direct Controller – Pilot Communications (DCPC).
- (4) In Canada, RNAV 1 has some potential for terminal RNAV use for SIDs and STARs in areas where multiple DME pairs are available.
- (5) Previously known as:
 - (a) “Operations Specification 612 – Terminal and En Route Area Navigation Operations (RNAV 1 AND 2)”.

Requirements:

Subpart	604	702	703	704	705
CAR	604.60(a)	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.76(15)	723.98(21)	724.115(22)	725.124(27)
DOC(s)	AC 700-019, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-019 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNAV 1 AND 2 RNAV 1 ET 2	705.08(g) (vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.4 Area Navigation 5 (RNAV 5)

Description:

- (1) Approval to conduct operations using area navigation, following RNAV 5 (B-RNAV) routes.
- (2) Previously known as:
 - (a) *“Operations Specification 613 – En Route Area Navigation Operations (RNAV 5)”*.

Requirements:

Subpart	604	702	703	704	705
CAR	604.59	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.76(15)	723.98(21)	724.115(22)	725.124(27)
DOC(s)	AC 700-015, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-015 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNAV 5	705.08(g) (vi)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.5 Required Navigation Performance 1 (RNP 1)

Description:

- (1) This approval is for operations using area navigation that meets the Required Navigation Performance (RNP) 1 specification, requiring on-board performance monitoring and alerting capabilities.
- (2) The RNP 1 navigation specification is intended to be applied on SIDs and STARs within 30 NM of the aerodrome where the surveillance services are limited or do not exist, and/or a ground-based RNAV infrastructure is not practical.
- (3) Position integrity bounding for RNP 1 can currently only be met using certified GNSS receivers.
 - (a) The GNSS receivers may be a part of a stand-alone navigation system or one of the sensors in a multi-sensor system.
- (4) Previously known as:
 - (a) *“Operations Specification 618 – Required Navigation Performance 1 (RNP 1) Airspace”.*

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.76(15)	723.98(21)	724.115(22)	725.124(27)
DOC(s)	AC 700-025, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-025 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNP 1	705.08(g)(vi)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.6 Required Navigation Performance 2 (RNP 2 (CONTINENTAL))

Description:

- (1) This approval is for operations using area navigation that meets the Required Navigation Performance (RNP) 2 specification, requiring on-board performance monitoring and alerting capabilities.
- (2) RNP 2 is intended for enroute application, primarily in areas where there is sparse or no ground NAVAID infrastructure, limited or no ATS surveillance, and low- to medium-density traffic.
- (3) RNP 2 requires the use of certified GNSS receivers.
 - (a) Operators are required to have the means to predict the availability of GNSS fault detection (e.g. ABAS RAIM) to support operations along an RNP 2 route.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.76(15)	723.98(21)	724.115(22)	725.124(27)
DOC(s)	AC 700-038, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-038 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNP 2 (CONTINENTAL) RNP 2 (CONTINENTALE)	705.08(g) (vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.7 Required Navigation Performance 4 Airspace (RNP 4)

Description:

- (1) This approval is for operations using area navigation that meets the Required Navigation Performance (RNP) 4 specification, requiring on-board performance monitoring and alerting capabilities.
- (2) RNP 4 is intended for oceanic or remote airspace where a robust ground-based navigation infrastructure is not available.
 - (a) Aircraft must have at least two fully serviceable independent long range navigation systems (LRNS) listed in the flight manual; both must be operational at the point of entry into RNP 4 airspace.
 - (b) Position integrity bounding can currently only be met using certified GNSS receivers.
 - i. The GNSS receivers may be part of a stand-alone navigation system or one of the sensors in a multi-sensor system.
 - ii. Where GNSS is an input as part of a multi-sensor system, the aircraft's position source must use GNSS positions exclusively during RNP 4 operations.
- (3) Previously known as:
 - (a) "Operations Specification 614 – Required Navigation Performance 4 (RNP 4) Airspace".

Requirements:

Subpart	604	702	703	704	705
CAR	604.58	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.76(15)	723.98(21)	724.115(22)	725.124(27)
DOC(s)	AC 700-006, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-006 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNP 4	705.08(g) (vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.8 Required Navigation Performance 10 Airspace (RNP 10)

Description:

- (1) This approval is for operations using area navigation that meets the Required Navigation Performance (RNP) 10 specification, requiring on-board performance monitoring and alerting capabilities.
- (2) RNP 10 was developed for operation in oceanic and remote areas and does not require any ground-based navaid infrastructure or assessment.
 - a. The airspace supports 50 NM lateral and the 50 NM longitudinal distance based separation minima.

Note: The existing RNP 10 designation is inconsistent with PBN RNP and RNAV specifications. RNP 10 does not include requirements for on-board performance monitoring and alerting.

- (3) Previously known as:
 - a. “Operations Specification 611 – Required Navigation Performance 10 (RNP-10)” (705).

Requirements:

Subpart	604	702	703	704	705
CAR	604.57	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(2)(e), 722.76(15)	723.08(2)(e), 723.98(21)	724.08(2)(e), 724.115(22)	725.08(2)(e), 725.124(27)
DOC(s)	AC 700-006, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-006 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNP 10	705.08(g) (vi)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.9 Required Navigation Performance Approach (RNP APCH)

Description:

- (1) RNP approach (RNP APCH) is the ICAO navigation specification designation for procedures currently published in Canada as “RNAV (GNSS)” and authorized under Special Authorization RNP APCH.
 - (a) They include approach operations with minima designated as “LNAV”, “LNAV/VNAV”, “LP” and “LPV”.
- (2) Currently, integrity bounding for an RNP APCH can only be met using certified GNSS receivers.
 - (a) The GNSS receivers may be part of a stand-alone navigation system or one of the sensors in a multi-sensor system.
 - (b) Where GNSS is an input as part of a multi-sensor system, the aircraft’s position source must use GNSS positions exclusively during RNP APCH operations.
- (3) Previously known as:
 - (a) “Operations Specification 100 – IFR Instrument Approaches - Global Positioning System (GPS)” (700).
 - (b) “Operations Specification 620 – RNP APCH”.

Requirements:

Subpart	604	702	703	704	705
CAR	604.50	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(3)	723.08(3)	724.08(3)	725.08(3)
DOC(s)	AC 700-023, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-023 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Background Information:

- (1) Operators who held Ops Spec 100 automatically satisfied the conditions for SA RNP APCH to LNAV minima; no further certification activity was required.
- (2) In some cases, operators holding Ops Spec 100 may also have been approved for LNAV/VNAV or LPV; however when converting the AOC from Ops Spec 100 to SA RNP APCH, approval to LNAV/VNAV and LPV minima was not automatic.



- (3) Operators who held Ops Spec 100, and who were seeking approval for LNAV/VNAV or LPV minima, were required to demonstrate they could meet the conditions for approval in accordance with AC 700-023.

NACIS Guidance:

- (1) The “**DESCRIPTION**” section has a mandatory pull-down list, containing the approved minima specifier options.
- (a) The options for minima specifiers are:
- “**LNAV only**”;
 - “**LNAV and LNAV/VNAV**”; or
 - “**LNAV, LNAV/VNAV, LP and LPV**”.
- (2) Where there are different minima specifiers required for different aircraft, there are two options:
- (a) The preferred option is to select the SA “**Required Navigation Performance Approach (RNP APCH)**”, choose the applicable aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields, and then select the appropriate minima specifier in the “**DESCRIPTION**” field drop-down list (i.e.; only one minima specifier is chosen).
- If there are aircraft exclusions that need to be noted, add them to the “**REMARKS**” field using the free text option, noting the aircraft type and registration, and its minima specifier.
- Note:** Free text entries have limited character length. The option to use the SA “**REGISTRATION MARKS**”, can also be used (see section 3.2.5(6)a “**Note**” of this volume), where aircraft can be grouped into make/model/series for each minima specifier.
- (b) For operators that have large numbers of aircraft that can be grouped under multiple common minima specifiers, each group of aircraft can be listed under a separate “**Required Navigation Performance Approach (RNP APCH)**” SA.
- There are four SA’s containing the text “**Required Navigation Performance Approach (RNP APCH)**”; they are specifically labelled “**Required Navigation Performance Approach (RNP APCH)**”, “**Required Navigation Performance Approach (RNP APCH) #2**”, “**Required Navigation Performance Approach (RNP APCH) #3**”, and “**Required Navigation Performance Approach (RNP APCH) #4**”.
- The first group of aircraft can be contained in the “**Required Navigation Performance Approach (RNP APCH)**” SA (as per (2)a., above), and the “**DESCRIPTION**” field should be selected for the first minima specifier.
 - The second group of aircraft can be added to the second SA “**Required Navigation Performance Approach (RNP APCH) #2**”, and the “**DESCRIPTION**” field should contain the second minima specifier.
 - “**Required Navigation Performance Approach (RNP APCH) #3**” and “**Required Navigation Performance Approach (RNP APCH) #4**” can be used for other groups with other minima specifiers (as required).
 - Where aircraft groupings cannot contain enough detail within the four possible SA’s (each with a discrete minima specifier in the “**DESCRIPTION**” field), the exclusion methodology mentioned in (2)a.i., above, can also be used.

Note: There is another SA “**RNP APCH**” for 701 ops – it has two spaces between the words – make sure not to select this one.



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SA Group: NAVIGATION
SPECIFICATIONS FOR PBN OPERATIONS



Example as Depicted in the Operations Specifications:

RNP APCH	705.08(g) (vi)	LNAV only LNAV seulement	AIRCRAFT / AÉRONEFS : DHC6 - DE HAVILLAND DHC6 300 (300) C-CCCC
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5.8.10 Required Navigation Performance Authorization Required Approach (RNP AR APCH)

Description:

- (1) The performance monitoring and alerting requirements for RNP AR APCH include many of the same characteristics as for RNP 4, Basic-RNP 1 and RNP APCH. However, in the case of RNP AR APCH, these requirements can be tighter and a number of additional requirements can be applied to more closely monitor or control each error source.
- (2) RNP Authorization Required approach (RNP AR APCH) procedures can be built with various levels of RNP lateral containment values on the initial, intermediate, final and missed approach segments.
 - (a) There are increasingly demanding aircraft certifications and operational approvals required when RNP values lower than 0.3 NM are applied in any of the segments.
 - i. These approaches will be published in pertinent publications as “RNAV (RNP)”.
- (3) As with all the other RNP navigation specifications, RNP AR APCH position integrity bounding can only be met by utilizing certified GNSS receivers.
- (4) An operator intending to apply for RNP AR APCH should review advisory circular AC 700-024, and determine:
 - (a) the accuracy to which the operator would like to conduct RNP AR APCH procedures (final and missed approach) and the operator's intent to conduct RF legs; and
 - (b) the capabilities of the operator's aircraft to support the desired RNP AR APCH procedures.
- (5) Previously known as:
 - (a) “Operations Specification 621 – RNP AR APCH”.

Requirements:

Subpart	604	702	703	704	705
CAR	604.50	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(3)	A723.08(3), H723.08(2)	724.08(3)	725.08(3)
DOC(s)	AC 700-024, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-024 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:



NACIS Guidance:

- (1) The **“DESCRIPTION”** section contains a mandatory pull-down field that must be selected.
- (a) For this SA, there are three options:
- “Lowest RNP AR APCH value 0.3, Lowest RNP AR Missed APCH value 1.0, RF Legs permitted”**; or
 - “Lowest RNP AR APCH value 0.1, Lowest RNP AR Missed APCH value 1.0, RF Legs permitted”**.
 - “Minima as authorized by the State of the Operator or lowest published, whichever is most restrictive”**, used for Foreign AOC’s only.

Example as Depicted in the Operations Specifications:

RNP AR APCH	705.08(g) (vi)	Lowest RNP AR APCH value 0.3, Lowest RNP AR Missed APCH value 1.0, RF Legs permitted RNP AR le plus bas valeur 0.3, RNP AR le plus faible valeur manquée APCH 1.0, RF Legs autorisé	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.11 Required Navigation Performance Radius To Fix Path Terminator (RNP – RADIUS TO FIX (RF) PATH TERMINATOR)

Description:

- (1) RF path terminator, referred to as an RF leg, is a specific fixed-radius curved path in a terminal or approach procedure. An RF leg is defined by a constant radius originating from a centre fix, the arc initial fix, the arc ending fix and the turn direction.
- (2) Only RNP systems are capable of flying RF legs, by providing precise and positive course guidance along a curved track, with the same containment value that would be achieved in a straight leg segment.
- (3) In addition, the distance travelled from beginning to end of the turn will remain constant for every aircraft. This allows longitudinal separation to be maintained throughout the turn for aircraft travelling at the same speed.
- (4) Previously known as:
 - (a) “Operations Specification 623 – RNP RADIUS TO FIX (RF) PATH TERMINATOR”.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(3)	723.08(3)	724.08(3)	725.08(3)
DOC(s)	AC 700-027, ICAO Performance-based Navigation Manual (Doc 9613)				

Guidance for Issuance:

Note: See AC 700-027 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNP - RADIUS TO FIX (RF) PATH TERMINATOR RNP - FIN DE TRAJECTOIRE SOUS FORME D'ARC JUSQU'AU REPERE (RF)	705.08(g)(vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.12 Required Navigation Performance Capability (RNPC)

Description:

- (1) Required Navigation Performance Capability (RNPC) is defined as a set of parameters describing lateral deviations from assigned or selected tracks, as well as along track position fixing accuracy, on the basis of an appropriate containment level.
- (2) The standard requirements for authorization to flight plan published high level fixed RNAV routes in Required Navigation Performance Capability (RNPC) airspace, or to be accommodated by Air Traffic Control (ATC) on other routes using RNPC separation criteria, are:
 - (a) aeroplanes must be equipped with at least two independent navigation systems, one of which must be a long range area navigation system; and
 - (b) flight crew must receive training on operation of the long range area navigation system, in accordance with the applicable CASS.
- (3) For 604 Operators only, if they meet 604.53, they do not require the SA **RNPC – High Level Fixed RNAV Routes** as this SA (SA **Required Navigation Performance Capability (RNPC)**) also permits the RNPC – High Level Fixed RNAV Routes.
- (4) Previously known as:
 - (a) “Operations Specification 052 – Operations in Performance Airspace” (702)
 - (b) “Operations Specification 015 – Operations in Performance Airspace” (703)
 - (c) “Operations Specification 037 – Operations in Performance Airspace” (704)
 - (d) “Operations Specification 077 – Operations in Performance Airspace” (705)

Requirements:

Subpart	604	702	703	704	705
CAR	604.53	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(2)	723.08(2)	724.08(2)	725.08(2)
DOC(s)	TP 14371 (RAC), TP 1820 (M7)				

Guidance for Issuance:

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNPC	705.08(g)(vi)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.8.13 Required Navigation Performance Capability High Level Fixed Area Navigation Routes (**RNPC – HIGH LEVEL FIXED RNAV ROUTES**)

Description:

- (1) Required Navigation Performance Capability (RNP) is defined as a set of parameters describing lateral deviations from assigned or selected tracks as well as along track position fixing accuracy on the basis of an appropriate containment level.
- (2) The standard requirements for authorization to flight plan published high level fixed RNAV routes in Required Navigation Performance Capability (RNP) airspace, or to be accommodated by Air Traffic Control (ATC) on other routes using RNP separation criteria, are:
 - (a) aeroplanes equipped with at least two independent navigation systems, one of which must be a long range area navigation system; and
 - (b) flight crew training on operation of the long range area navigation system in accordance with the Commercial Air Service Standards.
- (3) This SA is available for 604 operators who do not meet CAR 604.53 and cannot be authorized RNP due to equipment requirements.

Requirements:

Subpart	604	702	703	704	705
CAR	604.54	702.08(g)(vii)	703.08(g)(ix.1)	704.08(g)(vi)	705.08(g)(vi)
CASS	--	722.08(2)	723.08(2)	724.08(2)	725.08(2)
DOC(s)	TP 14371 (RAC), TP 1820 (M7)				

Guidance for Issuance:

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

RNPC- HIGH LEVEL FIXED RNAV ROUTES RNPC - ROUTES RNAV SUPÉRIEURES FIXES	705.08(g) (vi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.9 CONTINUING AIRWORTHINESS



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**SA Group: CONTINUING
AIRWORTHINESS**



5.9.1 Continuing Airworthiness

Reserved



5.10 ELECTRONIC FLIGHT BAG

**5.10.1 Electronic Flight Bag (EFB)****Description:**

(1) Approval to use Electronic Flight Bag (EFB) equipment on aircraft during flight operations.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xi)	705.08(g)(xi)
CASS	--				
DOC(s)	AC 700-020				

Guidance for Issuance:

COM Content:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:**Example as Depicted in the Operations Specifications:**

EFB OEPP	702.08(g) (xii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.11 AERIAL WORK



5.11.1 AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD

Description:

- (1) Approval to conduct aircraft night operations with persons other than flight crew on board.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

- (2) Previously known as:

- (a) *“Operations Specification 043 – Aircraft Night Operations With Persons Other Than Flight Crew On Board”.*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.18(3)(c)	N/A	N/A	N/A
CASS	--	722.18	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Aircraft Equipment:

- (1) As per CASS 722.18.

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD AÉRONEF EN VOL DE NUIT AVEC DES PERSONNES AUTRES QU'UN MEMBRE D'ÉQUIPAGE DE CONDUITE À BORD	702.18(3)(c)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.11.2 CARRIAGE OF PERSONS

Description:

(1) Approval to allow a person, who is not a flight crew member to be carried on board an aircraft.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

(2) Previously known as:

(a) “Operations Specification 040 – Carriage of Persons”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.16	N/A	N/A	N/A
CASS	--	722.16	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

CARRIAGE OF PERSONS TRANSPORT DES PERSONNES	702.16(b) &(c)(i)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.11.3 CUSMA – SPECIALTY AIR SERVICES OPERATIONS

Description:

(1) Approval to conduct CUSMA specialty air services operations in the U.S.A. or Mexico.

(a) Aerial work operations are conducted by aeroplanes or rotorcraft, and include the following types, as defined under the CUSMA:

- i. **Aerial Advertising:** The operation of an aircraft for the purpose of skywriting, banner towing, displaying airborne signs, dispensing leaflets, and making public address announcements.
- ii. **Aerial Construction:** The operation of a helicopter for the purpose of conducting external load operations in support of construction, hoisting of utilities, power line construction, and erection of special purpose towers.
- iii. **Aerial Inspection and Surveillance:** The operation of an aircraft for the purpose of conducting aerial observation and patrols for surface events and objects.
Note: This activity includes inspection and surveillance of animals.
- iv. **Aerial Mapping:** The operation of an aircraft for the purpose of mapping by use of a camera, or other measuring and recording devices.
- v. **Aerial Photography:** The operation of an aircraft for the purpose of taking photographs or recording information by use of a camera, or other measuring and recording device.
- vi. **Aerial Sightseeing:** The operation of an aircraft for the purpose of providing recreation to passengers. This flight originates and terminates at the same airport or the same aerodrome.

Note: Operators wishing to conduct this activity under CUSMA must possess a Domestic:

- a) CAR Subpart 703, 704 or 705 certificate, on which Aerial Sightseeing has been indicated as an aerial work type; or
- b) CAR Part IV Flight Training Unit Operator Certificate. See Volume 2 of TP 4711.

vii. **Aerial Spraying:** The operation of an aircraft for the dispersal of products.

Note: This does not include the dispensing of live insects.

viii. **Aerial Surveying:** The operation of an aircraft for the purpose of surveying by use of a camera, or other measuring and recording devices.

ix. **Fire-fighting:** The operation of an aircraft for the purpose of dispensing water, chemicals, and fire retardants intended for suppressing a fire.

Note: This includes the carrying of firefighters from base camp to base camp or base camp to the work zone.

x. **Flight Training:** Training provided by certified flight schools and flight training operators who follow an approved ground and flight syllabus that permits students to meet all certification requirements for obtaining an airman certificate or rating. Flight training also includes operational training provided by SAS operators.

Note: Operators wishing to conduct this activity under CUSMA must possess a CAR Part IV Flight Training Unit Operator Certificate. See Volume 2 of TP 4711.



- xi. **Forest Fire Management:** The operation of an aircraft for the purpose of fire detection and control, as well as for the purpose of dispensing any substance intended for forest fire suppression and prevention. This does include carrying fire fighters, fire bosses and/or managers from the base camp into the fire area, or to the actual fire site, as well as within the fire zone.
- xii. **Glider Towing:** The towing of a glider by a powered aircraft equipped with a tow hitch.
- xiii. **Heli-logging:** The operation of a helicopter for the purpose of transporting timber suspended from the fuselage of a helicopter.
- xiv. **Parachute Jumping:** The operation of an aircraft for the purpose of allowing a person to descend from an aircraft in flight using a parachute during all or part of that descent.

(2) Previously known as:

- (a) “Operations Specification 056 – NAFTA – Specialty Air Services – (Aerial Work) Operations”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	700.03	N/A	N/A	N/A
CASS	N/A	720.03	N/A	N/A	N/A
DOC(s)	FAA AC 00-60B, TCCA Form 26-0592				

Guidance for Issuance:

COM Content:

Maintenance Approval / Acceptance:

- (1) Ensure that the operator has maintenance arrangements in place to maintain the aircraft when operating away from their main base.

Supplemental Documents:

- (1) Applications for this SA should include a completed Form 26-0592.

Background Information:

- (1) As the state of registry retains responsibility for the regulatory oversight of aircraft on its register, including but not limited to, maintenance and inspection requirements, the issuance of this SA will likely lead to the requirement to add this operator into TCCA surveillance plans to include foreign locations during the period this SA is valid for.
- (2) The need to add bases and/or sub-bases to this AOC, when adding the CUSMA SA is likely.
 - (a) See Volume 2 of this manual series for further guidance.
 - (b) Bases utilized in a foreign country will require the issuance of the SA “OPERATIONS BETWEEN POINTS ABROAD”.



NACIS Guidance:

- (1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.
- (a) For this SA, there is only a free text option. Once selected, enter the following:
- i. “**Effective**”, then
 - ii. the effective date of the contract; and
 - iii. “**until**”, then
 - iv. The expiry date. Expiry date is calculated by adding up to, but not more than, 365 days to the effective date.
- (1) The “**REMARKS**” section must include:
- (a) The registration(s) of the aircraft to be used.
- i. Chosen using the “**Type Designator(s)**” and “**Registration Marks**” fields.
- (b) A list of the current pilots who are approved by the company for the operations sought (this is not a blanket list of all pilots in the company).
- i. Entered using the free text field.
- Note: It is very important that ONLY the pilots who will be doing the work, and are approved by the company, appear on this list, as this may expose them to the requirements of foreign laws and regulations.
- Note: The operator may manage this list of pilots in the operators’ approved COM, if the “**REMARKS**” include the statement “**Refer to COM for list of pilots**”. If the Operator decides to choose this option, the pilot list within the COM must be on board the aircraft, and kept current.
- ii. The inspector must verify the medical(s) and license(s) of the pilot(s), and list the license number(s) in the “**REMARKS**” column of the SA.
- (c) A list of all types of aerial work activities the “**CUSMA – SPECIALTY AIR SERVICES OPERATIONS**” SA is being approved for, chosen from the following:
- i. **Aerial Advertising**
 - ii. **Aerial Construction**
 - iii. **Aerial Inspection and Surveillance**
 - iv. **Aerial Mapping**
 - v. **Aerial Photography**
 - vi. **Aerial Sightseeing**
 - vii. **Aerial Spraying**
 - viii. **Aerial Surveying**
 - ix. **Fire-fighting**
 - x. **Flight Training**
 - xi. **Forest Fire Management**
 - xii. **Glider Towing**
 - xiii. **Heli-logging**
 - xiv. **Parachute Jumping**



Example as Depicted in the Operations Specifications:

<p>CUSMA – SPECIALTY AIR SERVICES OPERATIONS</p> <p>ACEUM - OPÉRATIONS DE SERVICES AÉRIENS SPÉCIALISÉS</p>	<p>700.03(3)</p>	<p>Effective 2020-01-01 until 2020-12-31. En vigueur 2020-01-01 jusqu'à 2020-12-31.</p>	<p>AIRCRAFT / AÉRONEFS : B06 - BELL 206 B (B); C-FZUQ</p> <p>Pilots/Pilotes: JOHN DOE AA123456, JANE DOE AA246810</p> <p>Types of Aerial Work: Aerial Advertising, Aerial Inspection and Surveillance, Aerial Mapping, Aerial Photography, Aerial Spraying, Aerial Surveying, Fire Fighting, Forest Fire Management, Glider Towing, Heli-logging, and Parachute Jumping.</p> <p>Types de travaux aériens: publicité aérienne, inspection et surveillance aériennes, cartographie aérienne, photographie aérienne, pulvérisation aérienne, levés topographiques aériens, lutte contre les incendies, gestion des feux de forêt, remorquage de planeurs, hélibardage, et saut en parachute.</p> <p>CONDITIONS ATTACHED CONDITIONS ATTACHÉES</p>
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SA Conditions Statement:

The authority for **CUSMA – SPECIALTY AIR SERVICES OPERATIONS** is granted subject to the following conditions:

- (1) Prior to commencement of operations in the United States of America or Mexico, the air operator must acquire a certificate of authorization from the foreign Civil Aviation Authority (CAA);
- (2) Other than flight crew members, the following persons may be carried on board the aircraft:
 - (a) the person is a flight crew member trainee, is a person undergoing training for essential duties during flight or is an air operator employee aircraft maintenance technician;
 - (b) the person is a fire-fighter or fire control officer being carried within a forest fire area;
 - (c) the person is being carried to an aerial work site, performs an essential function in connection with the aerial work operation, and is necessary to accomplish the aerial work operation.
- (3) During helicopter external load operations, persons not essential during flight are carried only in conjunction with a Class D load which complies with subsection 702.21(1) of the Canadian Aviation Regulations, except for:
 - (a) crew members undergoing training; and
 - (b) fire-fighters carried only in conjunction with a Class B load consisting of equipment necessary to fight fires within a forest fire area.
- (4) The Transport Canada Civil Aviation regional office must be notified of any changes to the list of aircraft or pilots listed in this operations specification.
 - (a) A copy of amended operations specifications shall be provided by the air operator to the appropriate CAA of the country where the operations are carried out;
- (5) Liability insurance must be carried on board the aircraft prior to operations in the United States of America or Mexico;
- (6) Prior to commencement of operations in Mexico, the air operator must comply with the Mexican CAA's survival equipment requirements; and
- (7) This authorization and the operating authority issued by the foreign CAA, must be carried on board the aircraft while operating specialty air services operations.



5.11.4 OPERATIONS OF AN AIRCRAFT OVER A BUILT-UP AREA

Description:

- (1) Approval to operate an aircraft over a built-up area or open-air assembly of persons at altitudes and distances less than those specified in paragraph 602.14(2)(a) of the Canadian Aviation Regulations.
- (2) Previously known as:
 - (a) *"Operations Specification 049 – Operation of an Aircraft over a Built-Up Area – 702.22(2)"*.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.22(2)	N/A	N/A	N/A
CASS	--	722.22	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Supporting Documentation:

- (1) An aerial work zone plan needs to be created and submitted with the accompanying application for the SA.
- (2) Where the operations will affect local authorities, letters of approval from those authorities will need to be obtained, and copies sent with the application for the SA.

Background Information:

- (1) There is a significant body of jurisprudence regarding the interpretation of what constitutes "built-up", most of which is in the context of low flying violations. In general, "built-up" means a group of structures that are erected or elevators, service stations and so forth. A departmental legal opinion indicates that a dock could be considered such a structure, particularly if it can be shown that there is a risk of damage to property or injury to persons. In situations where there is some doubt, it is better to err on the side of caution and issue an authorization.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

OPERATIONS OF AN AIRCRAFT OVER A BUILT-UP AREA UTILISATION D'UN AÉRONEF AU-DESSUS D'UNE ZONE BÂTIE	702.22(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.11.5 TAKE-OFF APPROACH OR LANDING WITHIN A BUILT-UP AREA

Description:

- (1) Approval to conduct a take-off, approach or landing in an aircraft within a built-up area of a city or town.
- (2) Previously known as:
 - (a) *"Operations Specification 048 – Take-Off, Approach or Landing within a Built-Up Area – CAR 702.22(1)(a)"*.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.22(1)	N/A	N/A	N/A
CASS	--	722.22	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Supporting Documentation:

- (3) An aerial work zone plan needs to be created and submitted with the accompanying application for the SA.
- (4) Where the operations will affect local authorities, letters of approval from those authorities will need to be obtained, and copies sent with the application for the SA.

Background Information:

- (2) The terms "city" or "town" are taken to mean a municipal entity incorporated as such. There are former towns, particularly in Ontario and Quebec, which have been absorbed by either townships or municipalities. These do not meet the current definition of "city" or "town" and authorities under CAR 702.22 should not be issued for these. Within the Province of Nova Scotia, "regional municipalities" shall be considered to be cities.
- (3) There is a significant body of jurisprudence regarding the interpretation of what constitutes "built-up", most of which is in the context of low flying violations. In general, "built-up" means a group of structures that are erected, or elevators, service stations and so forth. A departmental legal opinion indicates that a dock could be considered such a structure, particularly if it can be shown that there is a risk of damage to property or injury to persons. In situations where there is some doubt, it is better to err on the side of caution and issue an authorization.
- (4) The word "within" in this context has been interpreted to mean substantially surrounded by the built-up area. In practical terms, this would mean that a landing site would have to be surrounded on all four sides, or at least to the point that a landing aircraft would overfly a structure at some point, or fly close enough to create a hazard. As an example, a landing site on the edge of a town or on a shoreline would not require an authorization if the landing could be accomplished without overflying a structure or creating a hazard to any property.
- (5) CAR 702.22 allows for an Operations Specification to be issued giving landing authority on a more or less permanent basis. This should only be issued in exceptional circumstances and never to allow an air operator to avoid certifying a site which normally is required to be certified



under CAR 602.13. If this Operations Specification is to be issued, the site should be such that it would meet the standard for certification with only minor modification.

- (a) Aerodrome Safety should be consulted to ensure that this is possible.
- (6) Of particular concern are areas near hospitals within built-up areas, which are utilized occasionally for air ambulance operations. A recent legal opinion has determined that these areas meet the definition of a "place set apart for the operation of aircraft". This effectively precludes such landing sites from being used under the saving of human life provision in subsection 602.13(2) of the CARs. In such cases Aerodrome Safety may issue an aerodrome authorization, which would allow occasional use without requiring full certification. This process is still being developed and further policy will be issued.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

TAKE-OFF APPROACH OR LANDING WITHIN A BUILT-UP AREA DÉCOLLAGE, APPROCHE OU ATTERRISSAGE À L'INTÉRIEUR D'UNE ZONE BÂTIE	702.22(1) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12 AIRCRAFT PERFORMANCE



5.12.1 DHC-6 TWIN OTTER – REDUCED GROUND ROLL (RGR) TAKE-OFF

Description:

(1) Approval to conduct a reduced ground roll take-off using a DHC-6 Twin Otter aeroplane.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xii)	N/A
CASS	--				N/A
DOC(s)	AC 700-048				

Guidance for Issuance:

Note: See AC 700-048 for specific guidance information

COM Content:

Training Program Content:

Simulator Training:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

DHC-6 TWIN OTTER - REDUCED GROUND ROLL (RGR) TAKE-OFF DHC-6 TWIN OTTER – DÉCOLLAGE COURT (DC)	704.08(g) (xi)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12.2 EXCEPTIONS TO OPERATING LIMITATIONS – CONTAMINATED RUNWAYS

Description:

- (1) Approval to operate an aircraft from a contaminated runway, where the operator elects to use performance data from a source other than the Aeroplane Flight Manual.
- (2) Previously known as:
 - (a) “Operations Specification 067 - Exception to Aircraft Performance Operating Limitations - Contaminated Runways”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.54
CASS	--	N/A	N/A	N/A	725.54(1)(a)
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Background Information:

- (1) On occasion manufacturers will publish information/material that has not been approved during aircraft certification. “Non-approved” material can generally be divided into two types:
 - (a) information which was not required for the certification of the aircraft; and
 - (b) information that did not meet the safety/performance level required during certification of the aircraft.

In either instance, operators should follow this information/material with caution.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

EXCEPTIONS TO OPERATING LIMITATIONS - CONTAMINATED RUNWAYS	705.54(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
EXCEPTIONS AUX LIMITES D'UTILISATION - PISTE CONTAMINÉE			



5.12.3 EXCEPTIONS TO OPERATING LIMITATIONS – RECIPROCATING ENGINES – CARGO ONLY

Description:

- (1) Approval to operate a reciprocating engine aeroplane during cargo-only operations, from or to unprepared surfaces, when such operations are not specifically addressed in the Aeroplane Flight Manual.
- (2) Previously known as:
 - (a) “Operations Specification 073 - Exceptions to Aircraft Performance Operating Limitations - Reciprocating Engine - Cargo Only”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.54
CASS	--	N/A	N/A	N/A	725.54(1)(b)
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Background Information:

- (1) On occasion manufacturers will publish information/material that has not been approved during aircraft certification. “Non-approved” material can generally be divided into two types:
 - (a) information which was not required for the certification of the aircraft; and
 - (b) information that did not meet the safety/performance level required during certification of the aircraft.

In either instance, operators should follow this information/material with caution.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

EXCEPTIONS TO OPERATING LIMITATIONS - RECIPROCATING ENGINES - CARGO ONLY EXCEPTIONS AUX LIMITES D'UTILISATION - MOTEURS A PISTONS - FRET SEULEMENT	705.54(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12.4 EXCEPTIONS TO OPERATING LIMITATIONS – TAKE-OFF WEIGHT – ACCELERATE-STOP DISTANCE

Description:

- (1) Approval to conduct a take-off with a reciprocating-engine aeroplane without complying with the Take-off Weight Accelerate-stop Distance limitations, provided the air operator prevents more than 9 passenger seats being occupied.
- (2) Previously known as:
 - (a) “Operations Specification 074 - Exceptions to Aircraft Performance Operating Limitations - Take-Off Weight - Accelerate-Stop Distance”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.54
CASS	--	N/A	N/A	N/A	725.54(2)
DOC(s)					

Guidance for Issuance:

COM Content:

Background Information:

- (1) On occasion manufacturers will publish information/material that has not been approved during aircraft certification. “Non-approved” material can generally be divided into two types:
 - (a) information which was not required for the certification of the aircraft; and
 - (b) information that did not meet the safety/performance level required during certification of the aircraft.

In either instance, operators should follow this information/material with caution.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

EXCEPTIONS TO OPERATING LIMITATIONS - TAKE-OFF WEIGHT - ACCELERATE-STOP DISTANCE EXCEPTIONS AUX LIMITES D'UTILISATION - MASSE AU DÉCOLLAGE - DISTANCE ACCÉLÉRATION / ARRÊT	705.54(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12.5 FUEL REQUIREMENTS – EN ROUTE FUEL RESERVE REDUCTION

Description:

- (1) Approval to conduct operations on routes that are designated as not requiring the en-route fuel reserve.
- (2) Previously known as:
 - (a) “Operations Specification 060 – Fuel Requirements – Enroute Fuel Reserve Reduction”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.25(2)
CASS	--	N/A	N/A	N/A	725.25(1)(b), (2)&(3)
DOC(s)	TP 6327				

Guidance for Issuance:

COM Content:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Background Information:

5.12.5.1 Reduced Enroute Fuel Reserve - Designated Routes

- (1) Enroute Airports

CASS	725.25(2)(e)
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- (a) when flying on routes that do not require enroute reserve fuel, the aircraft should always be in a position to proceed to an alternate airport in the event that the fuel state, or any other matter that might affect the fuel state, makes diversion necessary; and
- (b) there must always be an adequate airport within 60 minutes of flying time with one engine inoperative. In this case, adequate means that the airport should have navigation and approach aids as well as sufficient runway length to accommodate the aircraft.

- (2) Weather Availability

CASS	725.25(2)(f)(ii)
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- (a) "Proven reliability in wind forecasting" means that the winds are forecast by a government or recognized private agency using accredited meteorologists and accepted forecasting techniques that meet ICAO standards;

- (3) Foreign Operating Rules, Routes & Airport Facilities

CASS	725.25(2)(h)
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- (a) Pilots and dispatchers exercising operational control over flights that operate in foreign airspace shall be fully conversant with foreign operating rules, routes and airport facilities which pertain to the area in which the carrier is operating.
 - i. Information on foreign rules can be obtained from enroute and airport charts, the COM sections dealing with foreign areas, foreign A.I.P.s, or any other recognized publication.

5.12.5.2 Reduced Enroute Fuel Reserve for the Portion of a Flight Outside Domestic Airspace (Reclear)

Tasks to Be Performed Before Being Granted with this Authorization

CASS	725.25(3)
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- (1) The following is a summary (but is not limiting) of changes required to operations:
 - (a) the operational control system must be adjusted accordingly by the addition of a "reclear" block of information, and fuel/flight planning;
 - (b) MELs should be amended, if required (more specifically communications requirements);
 - (c) establish the format of the inflight release message;
 - (d) establish the training program for flight crew members and flight dispatchers; and
 - (e) establish the SOPs and procedures for aeroplane systems.

Definition of Suitable Aerodrome

CASS	725.25(3)(a)
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- (1) For the purposes of this SA, a suitable aerodrome is one which has the capabilities, services and facilities necessary to be designated as an adequate aerodrome, and has the weather conditions and field conditions at the time of the particular operation which will provide a high assurance that an approach and landing can be safely completed with an engine and/or systems inoperative in the event that a diversion to an enroute alternate becomes necessary.

Route Segmentation

CASS	725.25(3)(b)
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- (1) The air operator has the option of segmenting a flight plan to only carry enroute fuel reserve for the segment requiring the most fuel;
 - (a) the segmentation of the route can be defined by the air operator, so long as the fuel requirements are met for each segment, including the 5% enroute reserve.
 - (b) Less fuel can be carried with shorter segments, but this increases the number of decision points and alternate airports required.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

FUEL REQUIREMENTS - EN ROUTE FUEL RESERVE REDUCTION EXIGENCES RELATIVES AU CARBURANT - RÉDUCTION DE RESERVE DE CARBURANT EN ROUTE	705.25(2)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12.6 NET TAKE-OFF FLIGHT PATH – VISUAL OBSTACLE AVOIDANCE

Description:

- (1) A pilot may, without fully complying with the Net Take-off Flight Path Limitations, operate a reciprocating engine aeroplane when visual obstacle avoidance is possible.
- (2) Previously known as:
 - (a) *“Operations Specification 075 – Exceptions to Aircraft Performance Operating Limitations - Net Take-Off Flight Path” (705).*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.54, 705.57(1)&(2)
CASS	--	N/A	N/A	N/A	725.54(3)
DOC(s)	AC 700-016				

Guidance for Issuance:

Note: See AC 700-016 for specific guidance information

COM Content:

Aircraft Performance:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

NET TAKE-OFF FLIGHT PATH - VISUAL OBSTACLE AVOIDANCE TRAJECTOIRE NETTE DE DÉCOLLAGE - ÉVITEMENT VISUEL DES OBSTACLES	705.54(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.12.7 NET TAKE-OFF FLIGHT PATH – GREATER BANK ANGLE

Description:

- (1) Approval to conduct a take-off where the bank used in the initial climb segment up to 400 feet requires an angle in excess of 15 degrees.
- (2) Previously known as:
 - (a) “Operations Specification 031 – Net Take-Off Flight Path – Greater Bank Angle” (704).
 - (b) “Operations Specification 068 – Net Take-Off Flight Path – Greater Bank Angle” (705).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	704.47(2)	705.57(3)
CASS	--	N/A	N/A		
DOC(s)	AC 700-016				

Guidance for Issuance:

Note: See AC 700-016 for specific guidance information

COM Content:

Aircraft Performance:

Aircraft Equipment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

NET TAKE-OFF FLIGHT PATH - GREATER BANK ANGLE	705.57(3)		ALL AIRCRAFT TOUS LES AÉRONEFS
TRAJECTOIRE NETTE DE DÉCOLLAGE - INCLINAISON LATÉRALE SUPÉRIEURE			



5.12.8 TRANSPORT OF PASSENGERS OPERATING SINGLE-ENGINED AEROPLANES - IFR OR NIGHT VFR FLIGHT

Description:

- (1) Approval to transport passengers using a single-engine aircraft in IFR or Night VFR flight conditions.
- (2) Previously known as:
 - (a) *"Operations Specification 001– Transport of Passengers in IFR Flight or Night VFR Flight operating a Single-Engine Aircraft".*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.22(2)	N/A	N/A
CASS	--	N/A	A723.22	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Simulator Training:

Aircraft Equipment:

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

TRANSPORT OF PASSENGERS OPERATING SINGLE-ENGINE AEROPLANES - IFR OR NIGHT VFR FLIGHT TRANSPORT DE PASSAGERS DANS UN AVIONS MONOMOTEUR - VOL IFR OU VFR DE NUIT	703.22(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13 FLIGHT CREW



5.13.1 ADVANCED QUALIFICATION PROGRAM

Description:

- (1) Approval to conduct training and qualifications checking using an Advanced Qualification Program.
- (2) Previously known as:
 - (a) “Operations Specification 072 – Advanced Qualification Program”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.08(g)(vii), 705.113(2)(c)
CASS	--	N/A	N/A	N/A	725.34(2)(h), 725.113(2), 725.124(26)(c), 725.124(37)(c)
DOC(s)	PL 169, TP 14672				

Guidance for Issuance:

Note: See Policy Letter 169 (*Development and implementation of an advanced qualification program (AQP)*) for specific guidance information.

COM Content:

Training Program Content:

Simulator Training:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

ADVANCED QUALIFICATION PROGRAM PROGRAMME DE QUALIFICATION PRÉALABLE	705.08(g) (vii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.2 AEROPLANE GROUPING FOR PPC PURPOSES

Description:

- (1) Approval for an operator to use aeroplane groupings when allocating PPC requirements, where the aircraft are designated as being “similar” in operating characteristics.
- (2) Previously known as:
 - (a) “Operations Specification 057 – Aeroplane Grouping for PPC Purposes” (702).
 - (b) “Operations Specification 012 – Aeroplane Grouping for PPC Purposes” (703).
 - (c) “Operations Specification 032 – Aeroplane Grouping for PPC Purposes” (704).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.08(g)(viii)	703.88(2)	704.108(2)	N/A
CASS	N/A	722.65(3)	723.88(1)(i)	724.108(2)	N/A
DOC(s)	AC 700-017, AC 700-018				

Guidance for Issuance:

COM Content:

Training Program Content:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

AEROPLANE GROUPING FOR PPC PURPOSES REGROUPEMENT D'AVIONS POUR BUT DE CCP	702.08(g)(viii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.3 FLIGHT ATTENDANT SEAT

Description:

- (1) Approval to permit a flight attendant seat to be occupied by a person other than a flight attendant.
- (2) Previously known as:
 - (a) “Operations Specification 066 – Flight Attendant Seats”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.41(3)
CASS	N/A	N/A	N/A	N/A	725.41(2)
DOC(s)	TP 12295, TP 12296				

Guidance for Issuance:

COM Content:

- (1) Operators, conducting operations under Subpart 705 that require flight attendants shall, as a part of their company operations manual, include procedures for the authorization of persons other than flight attendants who may occupy a flight attendant seat/station, in their flight attendant manual, as per TP 12295 - *Flight Attendant Manual Standard*.

Training Program Content:

- (1) Operators with approved flight attendant training programs, in accordance with TP 12296 - *Flight Attendant Training Standard*, shall include training that identifies the persons, other than a flight attendant, that are authorized to occupy flight attendant seats/stations.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

FLIGHT ATTENDANT SEAT SIÈGE D'AGENTS DE BORD	705.41(3) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.4 FLIGHT CREW MEMBER QUALIFICATIONS

Description:

- (1) Approval to conduct flight crew member training and qualifications checks by personnel other than those employed by the operator.
- (2) This SA is primarily for an operator to bring in external qualified pilots to train the internal pilots.
 - (a) This SA should not be used as a means to get around having properly qualified (current, PPC'd) pilots flying the aircraft during revenue operations.
 - (b) The goal for any operator obtaining this SA would be to qualify the internal pilots within a reasonable amount of time, so as to not require the use of external pilots.
- (3) Previously known as:
 - (a) "Operations Specification 013 – Flight Crew Member Qualifications" (703).
 - (b) "Operations Specification 033 – Flight Crew Member Qualifications" (704).
 - (c) "Operations Specification 071 – Flight Crew Member Qualifications" (705).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.88(6)	704.108(6)	705.106(3)
CASS	--	N/A	723.88(3)	A724.108(3), H724.108(2)	725.106(6)
DOC(s)					

Guidance for Issuance:

COM Content:

Supplementary Documentation:

- (1) Documents to include resumes and proof of background for external pilot being used under this SA authority.

Background Information:

- (1) The provision for special authority to permit an operator to use a flight crew member who is not qualified in accordance with the flight crew member qualifications of the applicable subsection of the CARs is intended to allow an operator to use a highly experienced pilot from another organization to conduct training and act as a crew member during initial introduction of a new type to the air operator's fleet.
 - (a) The duration of use of unqualified pilots will be limited and dependent on the aircraft complexity and logistics introducing the aircraft into service.
 - (b) Approval will only be in effect until an initial number of company pilots, sufficient to sustain the air service, have been qualified.
- (2) The SA isn't mandatory for anyone; it is optional.
 - (a) It is possible to conduct all the training in simulators, or on ferry/training/positioning flights.

NACIS Guidance:



- (1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “**The following pilots are authorized until initial training is completed on the new aircraft type:**”
- (2) The “**REMARKS**” section should be used to list the pilot names and license numbers who are authorized under this SA.

Example as Depicted in the Operations Specifications:

FLIGHT CREW MEMBER QUALIFICATIONS QUALIFICATIONS DES MEMBRES D'ÉQUIPAGE DE CONDUITE	704.108(6) (b)(i)	The following pilots are authorized until initial training is completed on the new aircraft type: Les pilotes suivants sont autorisés jusqu'à la fin de la formation initiale sur le nouveau type:	ALL AIRCRAFT TOUS LES AÉRONEFS Pilots: JOHN DOE AA123456 JANE DOE AA246810
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5.13.5 INCREASE IN FLIGHT DUTY PERIOD

Description:

- (1) Approval to assign a flight crew member for flight duty time, where the flight crew member's flight duty time will, as a result, exceed the flight duty time referred to in 700.16(1) and 702.93(1).
- (2) Previously known as:
 - (a) "Operations Specification 406 – Increase in Flight Duty Time" (604).
 - (b) "Operations Specification 093 – Increase in Flight Duty Time" (700).

Note: Regulations coming into force **12 December 2022** will lead to amendments to the provisions referencing the requirements for this SA.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.93(5)	700.16(7)	700.16(7)	N/A
CASS	--	722.93	720.16	720.16	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To include a description of the monitoring system.

Base Inspection:

- (1) CASI to verify pilot time tracking system is adequate:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INCREASE IN FLIGHT DUTY PERIOD AUGMENTATION DE LA PÉRIODE DE SERVICE DE VOL	700.16(7) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.6 INCREASE IN FLIGHT TIME

Description:

- (1) Approval to assign a flight crew member for flight time where the flight crew member's flight time will, as a result, exceed the flight time referred to in subsection 700.15(1) or 702.92(1).
- (2) Previously known as:
 - (a) *"Operations Specification 092 – Increase in Flight Time"*.

Note: Regulations coming into force on **12 December 2022** will lead to amendments to the provisions referencing the requirements for this SA.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.92(2)	700.15(2)	700.15(2)	N/A
CASS	--	722.92	720.15	720.15	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To include a description of the monitoring system.

Base Inspection:

- (1) CASI to verify pilot time tracking system is adequate:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

INCREASE IN FLIGHT TIME AUGMENTATION DU TEMPS DE VOL	700.15(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.7 MINIMUM CREW WITHOUT A SECOND-IN-COMMAND

Description:

(1) Approval to conduct flights operated under Instrument Flight Rules without a Second-in-Command.

(2) Previously known as:

(a) “Operations Specification 011 - Minimum Crew Without a Second-in-Command”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.86	N/A	N/A
CASS	--	N/A	723.86	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Aircraft Inspection:

(1) CASI to confirm in the respective Rotorcraft Flight Manuals that the helicopter(s) proposed for this SA are certificated for single-pilot IFR operations.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

MINIMUM CREW WITHOUT A SECOND-IN-COMMAND ÉQUIPAGE MINIMAL SANS COMMANDANT EN SECOND	703.86(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.8 PROGRAM OF CONTROLLED REST ON THE FLIGHT DECK

Description:

(1) Approval to conduct a program of controlled rest on the flight deck during extended flight operational periods.

(2) Previously known as:

(a) “Operations Specification 095 – Program of Controlled Rest on the Flight Deck”.

Note: Regulations coming into force on **12 December 2022** will lead to amendments to the provisions referencing the requirements for this SA.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	700.23	700.23	N/A
CASS	--	N/A	720.23	720.23	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

PROGRAM OF CONTROLLED REST ON THE FLIGHT DECK PROGRAMME DE REPOS AUX COMMANDES AU POSTE DE PILOTAGE	700.23(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.13.9 TIME FREE FROM DUTY

Description:

(1) Approval to conduct operations where the required time free from duty of any flight crew member has not met the requirements of CAR 700.19(1)(a)&(b) or 702.96(1)(a).

(2) Previously known as:

(a) *“Operations Specification 094 – Time Free from Duty”*.

Note: Regulations coming into force on **12 December 2022** will lead to amendments to the provisions referencing the requirements for this SA.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.96(2)	700.19(2)	700.19(2)	N/A
CASS	--	722.96	720.19	720.19	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

(1) To include a description of the monitoring system.

Base Inspection:

(1) CASI to verify pilot time tracking system is adequate:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

TIME FREE FROM DUTY PÉRIODE SANS SERVICE	700.19(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14 HELICOPTER OPERATIONS



5.14.1 AIRCRAFT OPERATING OVER WATER - HELICOPTERS

Description:

- (1) This SA allows the operation of a land aircraft over water, beyond the point where the land aircraft could reach shore in the event of an engine failure.
 - (a) For all over water flights not designated as an offshore operations flight.
- (2) Previously known as:
 - (a) "Operations Specification 045 – Aircraft Operating Over Water – Helicopters" (702).
 - (b) "Operations Specification 002 – Aircraft Operating Over Water – Helicopters" (703).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.20	703.23	N/A	N/A
CASS	--	722.20	H723.23	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To reflect the requirements of CASS 722.20(1)(e) and/or 722.20(2)(d) or 723.23(d).

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as detailed in CASS 722.20(1)(a) or 723.23(a).
- (2) As described in CASS 722.20(2)(a), a helicopter may be operated over water configured as a land aircraft without the helicopter being equipped with an emergency flotation kit provided the helicopter is being operated for the purpose of fire suppression, fish stocking or power line inspection and surveillance.

Aircraft Inspection:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

AIRCRAFT OPERATING OVER WATER - HELICOPTERS UTILISATION D'UN AÉRONEF AU-DESSUS D'UN PLAN D'EAU - HÉLICOPTÈRES	703.23(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.2 ENTERING OR LEAVING A HELICOPTER IN FLIGHT

Description:

- (1) This SA permits a person to enter or leave a helicopter in flight.
- (2) Previously known as:
 - (a) “Operations Specification 044 – Entering or Leaving a Helicopter in Flight”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.19	N/A	N/A	N/A
CASS	--	722.19	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To reflect the requirements of CASS 722.19(f).

Training Program Content:

- (1) To reflect the requirements of CASS 722.19(d).

NACIS Guidance:

Example as Depicted in the Operations Specifications:

ENTERING OR LEAVING A HELICOPTER IN FLIGHT ENTRER DANS UN HÉLICOPTÈRE OU LE QUITTER EN VOL	702.19(a) (iii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.3 HELICOPTER CLASS B, C OR D EXTERNAL LOAD – BUILT-UP AREA OR AERIAL WORK ZONE

Description:

- (1) This SA permits:
 - (a) the operation of a helicopter carrying a Class B, C or D jettisonable external load over a built-up area, or
 - (b) the establishment of an aerial work zone within a built-up area, for use by helicopters carrying Class B, C or D jettisonable external loads.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

- (2) Previously known as:

- (a) *“Operations Specification 050 – Helicopter Class B,C or D External Load - Built-Up Area or Aerial Work Zone”.*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.22(3)	N/A	N/A	N/A
CASS	--	722.22	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Supporting Documentation:

- (1) An aerial work zone plan needs to be created and submitted with the accompanying application for the SA.
- (2) Where the operations will affect local authorities, letters of approval from those authorities will need to be obtained, and copies sent with the application for the SA.

Background Information:

- (1) There is a significant body of jurisprudence regarding the interpretation of what constitutes "built-up", most of which is in the context of low flying violations. In general, "built-up" means a group of structures that are erected, or elevators, service stations and so forth. A departmental legal opinion indicates that a dock could be considered such a structure, particularly if it can be shown that there is a risk of damage to property or injury to persons. In situations where there is some doubt, it is better to err on the side of caution and issue an authorization.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

HELICOPTER CLASS B, C OR D EXTERNAL LOAD - BUILT-UP AREA OR AERIAL WORK ZONE CHARGE EXTERNE DE CLASSE B, C OU D HÉLICOPTÈRE - ZONE BÂTIE OU ZONE DE TRAVAIL AÉRIEN	702.22(3) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.4 HELICOPTER CLASS B, C OR D EXTERNAL LOAD – NIGHT, VFR OTT OR IFR

Description:

- (1) This SA permits a helicopter carrying a Class B, C or D external load to operate at night, in VFR OTT or in IFR flight.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

- (2) Previously known as:

- (a) “Operations Specification 051 – Helicopter Class B, C or D External Load Night, VFR OTT or IFR Flight”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.18(2)	N/A	N/A	N/A
CASS	--	722.18(4-7)	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To reflect the requirements of CASS 722.18(4)(g)(5)(g)(7)(f).

Training Program Content:

- (1) To reflect the requirements of CASS 722.18(5)(e).

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as detailed in CASS 722.18(4)(a)(c)(5)(a)(c)(6)(a)(7)(a)(b).

Aircraft Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

HELICOPTER CLASS B, C OR D EXTERNAL LOAD - NIGHT, VFR OTT OR IFR CHARGE EXTERNE DE CLASSE B, C OU D HÉLICOPTÈRE - VOL DE NUIT, VFR OTT OU IFR	702.18(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.5 HELICOPTER CLASS D EXTERNAL LOADS – MULTI-ENGINE (OEI CAPABLE)

Description:

- (1) This SA permits the operator of a Multi-Engine helicopter, which is One Engine Inoperative capable (OEI Capable), to carry a helicopter Class D external load.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

- (2) Previously known as:

(a) “Operations Specification 046 – Helicopter – CAR 702.21(1)(b) Class D External Loads”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.21(1)	N/A	N/A	N/A
CASS	--	722.21(1)	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To reflect the requirements of CASS 722.21(1)(e).

Aircraft Performance:

- (1) Operator to provide documentation that the helicopter is capable of hovering with one engine inoperative at the existing weight and altitude as described in CASS 722.21(1)(d).
- (a) The source of data by which this capability is determined, must be “TCCA Approved” data published in one of the following approved documents:
- Rotorcraft Flight Manual;
 - Rotorcraft Flight Manual Supplement; or
 - Rotorcraft Flight Manual Supplement approved as part of a Supplemental Type Certificate.
- (b) “Manufacturer’s Data” may have been validated and may appear in one of the above documents, but data which is not “TCCA Approved” in the flight manual or supplement is not approved for the calculation of OEI capability under CAR 702.21(1).

Aircraft Equipment:

- (1) Ensure the helicopter is equipped as detailed in CASS 722.21(1)(a)(b)(c)

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:



Example as Depicted in the Operations Specifications:

HELICOPTER CLASS D EXTERNAL LOADS - MULTI-ENGINE (OEI CAPABLE) CHARGES EXTERNES DE CLASSE D HÉLICOPTÈRE - MULTIMOTEUR (CAPABLE D'UN VOL STATIONNAIRE AVEC UN MOTEUR INOPÉRANT)	702.21(1) (b)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.6 HELICOPTER CLASS D EXTERNAL LOADS (LIMITED) – SINGLE OR MULTI-ENGINE (NOT OEI CAPABLE)

Description:

(1) This SA permits the operator of a Single and/or Multi-Engine helicopter, unable to hover with one engine inoperative (i.e.; not OEI Capable), to carry a helicopter Class D external load.

(a) For the purpose of law enforcement operations, forest fire suppression operations, urban fire-fighting operations, or rescue operations.

Note: 702 Operators will need to have identified in their Mandatory Approvals on their AOC that they conduct this type of Aerial Work.

- See Chapter 4 Section 4.5 of this volume.

(2) Previously known as:

(a) “Operations Specification 047 – Helicopter – CAR 702.21 (2)(a) Class D External Loads”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.21(2)	N/A	N/A	N/A
CASS	--	722.21(2)	N/A	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

(1) To reflect the requirements of CASS 722.21(2)(v)(2)(ix).

Aircraft Equipment:

(1) Ensure the helicopter is equipped as detailed in CASS 722.21(2)(a)(i)(ii)(iii)(2)(b)(i)(ii)(iii)(iv).

Aircraft Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

HELICOPTER CLASS D EXTERNAL LOADS (LIMITED) - SINGLE OR MULTI-ENGINE (NOT OEI CAPABLE) CHARGES EXTERNES DE CLASSE D HÉLICOPTÈRE (LIMITÉ) - MONOMOTEUR OU MULTI-MOTEUR (PAS CAPABLE D'UN VOL STATIONNAIRE AVEC UN MOTEUR INOPÉRANT)	702.21(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.14.7 MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS

Description:

- (1) This SA permits the operator of a helicopter to:
 - (a) conduct a take-off, approach or landing within a built-up area of a city or town, or
 - (b) operate at altitudes and distances less than those specified in CAR 602.14(2).
- (2) Previously known as:
 - (a) "Operations Specification 010 – Helicopters – Minimum Altitudes and Distances" (703).
 - (b) "Operations Specification 027 – Helicopters – Minimum Altitudes and Distances" (704).

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.36	704.31	N/A
CASS	--	N/A	H723.36	H724.31	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) To reflect the requirements of CASS 723.36(2), 724.31(2).

Training Program Content:

Supporting Documentation:

- (1) An aerial work zone plan needs to be created and submitted with the accompanying application for the SA.
- (2) Where the operations will affect local authorities, letters of approval from those authorities will need to be obtained, and copies sent with the application for the SA.

Background Information:

- (1) There is a significant body of jurisprudence regarding the interpretation of what constitutes "built-up", most of which is in the context of low flying violations. In general, "built-up" means a group of structures that are erected or elevators, service stations and so forth. A departmental legal opinion indicates that a dock could be considered such a structure, particularly if it can be shown that there is a risk of damage to property or injury to persons. In situations where there is some doubt, it is better to err on the side of caution and issue an authorization.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS	703.36(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
ALTITUDES ET DISTANCES MINIMALES - HÉLICOPTÈRES			



5.14.8 NUMBER OF PASSENGERS IN SINGLE-ENGINE HELICOPTERS

Description:

- (1) This SA permits the operation of a single-engine helicopter with more than nine (9) passengers on-board, where that aircraft is designed to accommodate those passengers.
- (2) Previously known as:
 - (a) “Operations Specification 003 – Number of Passengers in Single-Engine Helicopters”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.24	N/A	N/A
CASS	--	N/A	H723.24	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

- (1) To reflect the requirements of CASS 723.24

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a free text field that can be used to enter passenger load restrictions for this SA.

Example as Depicted in the Operations Specifications:

NUMBER OF PASSENGERS IN SINGLE-ENGINE HELICOPTERS NOMBRES DE PASSAGERS A BORD D'UN HELICOPTERE MONOMOTEUR	703.24(b)	10 passengers. 10 passagers.	ALL AIRCRAFT TOUS LES AERONEFS
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5.15 OPERATING AGREEMENTS



5.15.1 CAPACITY PURCHASE AGREEMENT

Description:

(1) Approval to conduct operations under the conditions of a Capacity Purchase Agreement.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	N/A	N/A	705.08(g)(xi)
CASS	--	N/A	N/A	N/A	
DOC(s)					

Guidance for Issuance:

COM Content:

Supporting Documentation:

NACIS Guidance:

(1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.

(a) For this SA, there is only one option:

i. “Operations conducted under a commercial agreement between”.

(b) Once the above is selected, the free text field below the pull-down becomes available for use to enter the following:

- i. Operator name; then
- ii. “**and**”, then
- iii. Contractor name. Then
- iv. “**effective**”, then
- v. the effective date of the contract, then
- vi. “**until**”, and
- vii. The expiry date.

(2) The “REMARKS” section can be used for further free text entries, if required.

Example as Depicted in the Operations Specifications:

CAPACITY PURCHASE AGREEMENT ACCORD D'ACHAT DE CAPACITÉ	705.08(g) (xi)	Operations conducted under a commercial agreement between Activités menées en vertu d'un accord commercial entre XXXXX and YYYYY effective 2020/01/01 until 2020/12/31. XXXXX et YYYYY en vigueur 2020/01/01 jusqu'au 2020/12/31.	Aircraft/Aéronef: C-AAAA Sub-base/Sous-Base: CYOW
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5.15.2 EXTENDED CHARTER

Description:

- (1) This SA allows a Canadian air operator to provide all or part of an aircraft, with crew members, to another air operator (i.e., CAR Parts 7) or to a foreign operator (with no CAR Subpart 701 authority), in order to supplement the fleet of that operator for a specified period of 21 days or more.

Note: An extended charter is synonymous with what ICAO considers a “wet lease”, with the exception that an extended charter, by definition, has a duration of 21 days or more.

- (a) Under an Extended Charter:
- i. The Applicant/Operator:
 1. operates the aircraft under their AOC;
 2. supplies one or more crew; and
 3. maintains the aircraft.
 - ii. The Charterer:
 1. has commercial control of the operation; and
 2. may use their airline designator code and traffic rights.
- (2) The applicant/operator applies for and, when all conditions are met, will be granted the Extended Charter SA.
- (3) Previously known as:
- (a) “Operations Specification 090 – Extended Charter”.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	700.06	700.06	700.06	700.06
CASS	--	720.06	720.06	720.06	720.06
DOC(s)	AN B033				

Guidance for Issuance:

COM Content:

Maintenance Approval / Acceptance:

- (1) Maintenance arrangements must be approved in accordance with Airworthiness Notice (AN) No. B033 *Maintenance Requirements for the Issuance of Extended Charter and Points Abroad Operational Authority*.
- (3) Ensure that the applicant/operator has maintenance arrangements in place to maintain the aircraft when they are being operated for the charterer, including when operating away from their main base.

Supporting Documentation:

- (1) A letter from the Foreign Civil Aviation Authority (CAA) is required if the extended charter is being operated for a charterer conducting operations in a foreign country.
- (a) The letter should contain:



- i. Acknowledgement of the fact that the extended charter operations are occurring in that country, and that the foreign CAA has no objections; and
 - ii. Should TCCA staff be required to conduct a surveillance event on the Canadian air operator in the foreign country, the foreign CAA would not object.
- (2) A copy of the contract between the applicant/operator and the charterer:
 - (a) Contract should contain:
 - i. The legal name of the charterer;
 - ii. The legal name of the applicant/operator;
 - iii. The trade name the applicant/operator intends to operate under, if authorized, in the extended charter agreement;
 - iv. the type(s) of Canadian aircraft provided under the extended charter agreement;
 - v. the registration(s) of aircraft referred to in paragraph (iv), if all aircraft of that type in the applicant/operator's fleet are not provided under the extended charter agreement;
 - vi. the responsibilities of the charterer and the applicant/operator during the term of the extended charter;
 - vii. the period covered by the extended charter agreement;
 - viii. in the case of an agreement between two Canadian air operators, a description of the type(s) of operation (Domestic, Scheduled International or Non-Scheduled International);
 - ix. the proposed area(s) of operation, along with airports to be served;
 - x. a copy of the appropriate "non-financial parts" of the extended charter agreement;
 - 1. if the agreement is accessible on the World Wide Web (ex., SEDAR website), the internet web address can be supplied; and
 - xi. confirmation that the maintenance control manual has been approved to include maintenance provisions for *extended charter* operations.

Background Information:

- (1) The applicant/operator must demonstrate that they have sufficient systems, equipment and facilities for the control and safe conduct of extended charter operations.
- (2) Applications will be considered where:
 - (a) the responsibilities of the charterer and the applicant/operator clearly show that flight operations will be conducted under the applicant/operator's AOC, and that the charterer's responsibilities are to provide commercial control only, without conflicting with the operational control responsibilities of the applicant/operator;
 - (b) the applicant/operator has an acceptable regulatory compliance record;
 - (c) there are no other significant risk indicators beyond those identified and mitigated, as per (3) below; and
 - (d) the level of detail provided in the applicant/operator's submission is sufficient to allow for approval without an on-site visit of the foreign operation.
- (3) A sufficient level of detail may include documentation that demonstrates that the applicant/operator:
 - (a) has analysed the hazards and identified any risks to the proposed operation; and



- (b) has implemented or designed appropriate risk mitigation strategies, where applicable.
- (4) If additional verification is required, a process inspection (re: Staff Instruction (SI) SUR-001), targeted at the key process or processes the applicant/operator uses to control its sub-base or foreign operation, is to be conducted as part of the certification or approval activity.
- (5) There may be an associated requirement for the applicant/operator to apply for an amendment to their AOC, based on one or more of the following issues:
- (a) Where a trade name is going to be used by the applicant/operator in association with the extended charter, the AOC and associated Operations Specification(s) are to be amended to include that trade name.
 - (b) The applicant/operator must have the Area(s) of Operation on their AOC in which the extended charter operations are to take place.
 - (c) Where the type of operation under an extended charter includes Scheduled International or Non-Scheduled International operations, the applicant/operator should hold an ICAO-compliant AOC and associated Operations Specification applicable to the aircraft being operated.
 - (d) Likely, there will be the need to add one or more sub-bases to the applicant/operator's AOC.
 - (e) Where an extended charter agreement involves a foreign air operator and a Canadian air operator, the Canadian air operator must, where operations are to be conducted between points abroad, apply to have its AOC and Associated Ops Specs amended to reflect the authorization "Between Points Abroad", as necessary.
- (6) For extended charter agreements between two Canadian air operators, TCCA should advise the applicant/operator to contact the CTA in order to ascertain whether the applicant/operator's Licence has to be amended, or whether an exemption from any regulatory requirement of the CTA is needed.

Trade Names:

- (1) Section 18(c) of the *Air Transportation Regulations* states that "*the licensee shall not operate an international service, or represent by advertisement or otherwise the licensee as operating such a service, under a name other than that specified in the licence.*"

Note: The licensee referred to above includes both the charterer and the Canadian air operator conducting flight operations on a scheduled or non-scheduled international air service. The name the service is operating under is, for the purpose of the AOC held by either party, a trade name, if it is different from names indicated on the AOC.

Note: At the present time, the CTA has only required the charterer to amend their air service licence to reflect the trade name that operations are being operated under, in accordance with the extended charter agreement. The CTA has not required the charterer to provide an AOC that reflects the trade name.

- (2) For the purpose of this policy, where it is planned to have a Canadian air operator conduct flight operations that includes international or domestic services, under a "trade name" that has been chosen by the charterer and authorized for use by the air operator in an *extended charter agreement*, the air operator should advise TCCA of its intent to operate under that "trade name".

Note: As there is currently no regulatory requirement for an air operator to request an amendment to their AOC to reflect the addition of a trade name, the air operator need only advise TCCA of the intent to operate under that trade name.

Note: Charges specified in Subpart 104 of the CARs, Item 10 of Schedule VII do not apply as the decision to amend the AOC and associated operations specifications is Transport Canada's, and not the air operator's.



NACIS Guidance:

- (1) The **“DESCRIPTION”** section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. **“Operations conducted under a commercial agreement between”**.
 - (b) Once the above is selected, the free text field below the pull-down becomes available for use to enter the following:
 - i. Operator name; then
 - ii. **“and”**, then
 - iii. Contractor name. Then
 - iv. **“effective”**, then
 - v. the effective date of the contract, then
 - vi. **“until”**, and
 - vii. The expiry date.
- (2) The **“REMARKS”** section can be used for further free text entries, if required. Common examples would be:
 - (a) aircraft registration marks;
 - (b) sub-base(s); and
 - (c) destinations between the two Operators;
 - i. include the countries and the applicable aerodrome identifiers.
- (3) In the event that the applicant/operator enters into more than one extended charter agreement (i.e.; with different contractors), or enters into an agreement with the same contractor but having significantly different agreement conditions, there are available in NACIS multiple **“EXTENDED CHARTER”** SA's; These SA's are named **“Extended Charter”**, **“EXTENDED CHARTER #2”**, **“EXTENDED CHARTER #3”**, etc.
 - (a) Each extended charter agreement should be summarized within a separate **“EXTENDED CHARTER”** SA.

Example as Depicted in the Operations Specifications:

EXTENDED CHARTER AFFRÈTEMENT DE DURÉE PROLONGÉE	700.06(a)	Operations conducted under Extended Charter agreement between Opérations menées dans le cadre d'un accord d'affrètement étendu entre XXXXX and YYYYY effective 2020/01/01 until 2020/12/31. XXXXX et YYYYY en vigueur 2020/01/01 jusqu'au 2020/12/31.	Aircraft/Aéronef: C-FAAA Sub-Bases/Sous-base: CYYZ, CYOW
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5.15.3 MANAGEMENT AGREEMENT

Description:

- (1) Approval to manage another air operator's operation.
- (2) Previously known as:
 - (a) *"Operations Specification 091 – Management Agreement"*.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	700.07	700.07	700.07	700.07
CASS	--	720.07	720.07	720.07	720.07
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) TCCA shall verify that the Operations Manager, Chief Pilot, and a person responsible for the maintenance control system (PRM) or a Maintenance Manager (if the managing air operator does not hold an approved maintenance organization (AMO) certificate) are qualified for the intended operation.

Maintenance Approval / Acceptance:

- (1) Ensure the managed operator's documentation identifies the PRM or Maintenance Manager in its hierarchy and their responsibilities.

Supporting Documentation:

- (1) A copy of the contract between the applicant and the managed operator (receiving the management services):

NACIS Guidance:

- (1) The **"DESCRIPTION"** section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. **"Management services being provided under an agreement between"**.
 - (b) Once the above is selected, the free text field below the pull-down becomes available for use to enter the following:
 - i. Operator name; then
 - ii. **"and"**, then
 - iii. Contractor name. Then
 - iv. **"effective"**, then
 - v. the effective date of the contract, then
 - vi. **"until"**, and
 - vii. The expiry date.
- (2) The **"REMARKS"** section can be used for further free text entries, if required.



Example as Depicted in the Operations Specifications:

MANAGEMENT AGREEMENT ACCORD DE GESTION	700.07(a)	Management services being provided under an agreement between Services de gestion fournis dans le cadre d'un accord entre XXXXXX and YYYYYY effective 2020/01/01 until 2020/12/31. XXXXXX et YYYYYY en vigueur 2020/01/01 jusqu'au 2020/12/31.	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.16 SPECIAL USE AIRSPACE



5.16.1 Automatic Dependent Surveillance-Broadcast Operations (**ADS-B**)

Description:

- (1) Approval to conduct flights using ADS-B equipment.
 - (a) Operators utilizing ADS-B in Canada do not require this approval. However, this SA is available upon request by an operator.
 - i. The most common situation triggering this type of request from an operator would be where they need it to satisfy a foreign CAA requirement.
- (2) Automatic Dependent Surveillance - Broadcast (ADS-B) is a surveillance technology that gives controllers the opportunity to provide radar-like services. It uses aircraft avionics, satellites and/or ground infrastructure to relay a range of aircraft parameters to air traffic control (ATC). The system is:
 - (a) automatic, since no external stimulus is required for operation, and
 - (b) dependent, because it relies on aircraft avionics to provide surveillance services through broadcast messages.
- (3) Previously known as:
 - (a) *"Operations Specification 609 – ADS-B Operations" (702-3-4-5).*

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(i)	703.08(g)(i)	704.08(g)(i)	705.08(g)(i)
CASS	--				
DOC(s)	AC 700-009				

Guidance for Issuance:

Note: See AC 700-009 for specific guidance information

COM Content:

Training Program Content:

Aircraft Equipment:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

ADS-B	705.08(g)(i)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.16.2 Automatic Dependent Surveillance-Contract Operations (**ADS-C**)

Description:

(1) Approval to conduct operations using ADS-C equipment.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(i)	703.08(g)(i)	704.08(g)(i)	705.08(g)(i)
CASS	--				
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Aircraft Equipment:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

ADS-C	705.08(g) (i)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.16.3 Controller–Pilot Data Link Communications Operations (**CPDLC**)

Description:

(1) Approval to conduct operations using equipment meeting the CPDLC requirements.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(i)	703.08(g)(i)	704.08(g)(i)	705.08(g)(i)
CASS	--				
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

Aircraft Equipment:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

CPDLC	705.08(g) (i)	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.16.4 North Atlantic – High Level Airspace Operations (NAT HLA)

Description:

- (1) Approval to conduct operations in North Atlantic – High Level Airspace (Minimum Navigation Performance Specification) airspace.
 - (a) This airspace extends from FL 285 to FL 420.
 - i. Operations within this airspace are allowed between FL 290 and FL 410.
- (2) Aircraft separation and safety are ensured by demanding the highest standards of horizontal and vertical navigation performance/accuracy and operating discipline.
- (3) Where operators only have one functional LRNS, they may request authorization to utilize Blue Spruce Routes within the North Atlantic – High Level Airspace.

Note: Operations on Blue Spruce Routes also require ADS-B operational certification and use.

- (4) Previously known as:
 - (a) “Operations Specifications 407 – Performance Airspace” (604).
 - (b) “Operations Specifications 037 – Performance Airspace” (704).
 - (c) “Operations Specifications 077 – Performance Airspace” (705).

Note: Operators carrying the former SA “**NAT-MNPS**” and/or “**NAT-MNPS (Blue Spruce Routes)**” are no longer able to use the NAT-HLA airspace (as of 30 January, 2020).

Requirements:

Subpart	604	702	703	704	705
CAR	604.55	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xi)	705.08(g)(xi)
CASS	--	722.08(2)(c)	A723.08(2)(c)	A724.08(2)(c)	725.08(2)(c)
DOC(s)	CASA 2019-10; TP 14371 (NAT); ICAO NAT Doc 007 - <i>North Atlantic Operations and Airspace Manual</i> ; ICAO NAT OPS Bulletin 2016_001 - <i>Re-naming of the NAT MNPSA to NAT HLA</i>				

Guidance for Issuance:

- (1) See Casa 2019-10 for guidance on the issuance of this SA.
- (2) Operators who hold the following SAs may be issued the new “**North Atlantic – High Level Airspace Operations (NAT HLA)**” SA with no further review of COMs, etc.
 - (a) For unrestricted operations within NAT HLA (All NAT HLA Airspace):
 - i. “**NAT MNPS**”
 - ii. “**RVSM**”
 - iii. “**PBCS**” or “**ADS-C**” and “**CPDLC**” (FANS 1/A)

Note: As the SA’s “**ADS-C**” and “**CPDLC**” are very recent additions to AOC’s, operators who hold ADS-C and CPDLC certification (i.e.; equipment installation, operational procedures, and training) may be given credit for meeting these SA requirements.

- iv. “**RNP 4**” or “**RNP 10**”



Note: “**RNP 4**” or “**RNP 10**” are required for New York Oceanic East and Santa Maria Oceanic FIR’s only.

(b) For restricted operations in NAT HLA (Blue Spruce Routes only)

- i. “**RVSM**”
- ii. ADS-B certification and use

Note: The “**ADS-B**” SA is not mandated in Canada, but is available in NACIS, if required by the operator for flights within foreign airspace.

(3) To operate within NAT HLA airspace along core NAT tracks using the Organized Track System (between FL350 – FL390), operators require the “**PBCS**” special authorization.

Note: For operators having “**ADS-C**” and “**CPDLC**”, use of these tracks will not be available.

(4) Operators currently operating in the NAT region may not necessarily have the training in accordance with ICAO Doc 007 described in their COM. However, to continue to operate in that airspace, they must update their training program to incorporate the elements detailed in ICAO Doc 007.

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

(1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.

(a) For this SA, there are two options for the limitations:

- i. “**All NAT HLA Airspace**”; or
- ii. “**Blue Spruce Routes Only**”.

(2) Where there are different limitations required for different aircraft, there are two options:

(a) The preferred option is to select the SA “**North Atlantic – High Level Airspace Operations (NAT HLA)**”, choose the applicable aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields, and then select the appropriate limitation in the “**DESCRIPTION**” field drop-down list (i.e.; only one limitation is chosen).

- i. If there are aircraft exclusions that need to be noted, add them to the “**REMARKS**” field using the free text option, noting the aircraft type and registration, and its limitation.

Note: Free text entries have limited character length. The option to use the SA “**Registration Marks**”, can also be used (see section 3.2.5(6)a Note), where aircraft can be grouped into make/model/series for each limitation.

(b) For operators that have aircraft that need to be grouped under the two different limitations (“**All NAT HLA Airspace**” and “**Blue Spruce Routes Only**”), each group of aircraft can be listed under a separate “**North Atlantic – High Level Airspace Operations (NAT HLA)**” SA.



- i. There are two SA's containing the text "**North Atlantic – High Level Airspace Operations (NAT HLA)**"; they are specifically labelled "**North Atlantic – High Level Airspace Operations (NAT HLA)**" and "**North Atlantic – High Level Airspace Operations (NAT HLA) #2**".
1. The first group of aircraft can be contained in the "**North Atlantic – High Level Airspace Operations (NAT HLA)**" SA (as per (2)a., above), and the "**DESCRIPTION**" field should be selected for "**All NAT HLA Airspace**".
 2. The second group of aircraft can be added to the second SA "**North Atlantic – High Level Airspace Operations (NAT HLA) #2**", and the "**DESCRIPTION**" field should be selected for "**Blue Spruce Routes Only**".
 3. Where aircraft groupings cannot contain enough detail within the two possible SA's (each with a discrete limitation in the "**DESCRIPTION**" field), the exclusion methodology mentioned in (2)(a)i., above, can also be used.

Example as Depicted in the Operations Specifications:

NAT HLA	705.08(g) (xi)	All NAT HLA Airspace Tout NAT HLA Espace aérien	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.16.5 Performance Based Communication and Surveillance Operations (PBCS)

Description:

- (1) This authorization will enable Canadian air operators and private operators, that wish to benefit from operations and separation minima that require the RCP 240 and/or RSP 180 specification, to conduct operations in airspace where Performance-Based Communications and Surveillance (PBCS) separations are being applied.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xi)	705.08(g)(xi)
CASS	--				
DOC(s)	AC700-041				

Guidance for Issuance:

Note: See AC 700-041 for specific guidance information

COM Content:

SOPs Developed / Amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

In-Flight or Simulator Check Flight:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) The “**DESCRIPTION**” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “**RCP 240 AND RSP 180**”.
- (2) This approval is issued to the specific aircraft mark(s).
 - (a) Be sure to specify the aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields.

Note: Where the operator has a large fleet, and volume of registration marks will be difficult to display in the SA; the use of the optional SA “**REGISTRATION MARKS**” is recommended.

If choosing this option:

 1. The free text field in the “**REMARKS**” section should include the statement “*Please see the included SA REGISTRATION MARKS for specific aircraft registrations associated with the Type Designator listed above*”; and
 2. The “**REGISTRATION MARKS**” SA will need to be completed.
 - b. See section 5.17.8



Note: There is no charge for the “**REGISTRATION MARKS**” SA, as it is being used to facilitate the issuance of this or other SA’s (i.e.; it is an administrative action by TCCA).

(3) Following the issuance of this SA, the inspector is required to send PBCS information to the RVSM mailbox (TC.RVSM.TC@tc.gc.ca).

(a) The information required for the RVSM addition of aircraft mark is detailed as:

- i. State of Registry of the aircraft;
- ii. Operator Legal Name and three-letter ICAO designator (if available);
- iii. State of Operator;
- iv. Aircraft Type Designator;
- v. Aircraft Mark (Registration);
- vi. Aircraft Mark (Series);
- vii. Manufacturer's Serial Number/construction number;
- viii. Aircraft Mode S Address Code (hexadecimal code format);
- ix. Airworthiness Approval Date or most recent Service Bulletin (SB) Date;
- x. Date of Airborne Flight Monitor (if available);
- xi. RCP 240 Approval date;
- xii. RCP 240 Expire Date (if applicable);
- xiii. RSP 180 Approval date; and
- xiv. RSP 180 Expire Date (if applicable).

(b) For removal of an aircraft from the PBCS database, the following information should be sent:

- i. Please remove aircraft, Reg mark C-XXXX;
- ii. Serial no; and
- iii. Effective Date.

(c) Once received by HQ, the PBCS database is updated (bi-weekly).

Example as Depicted in the Operations Specifications:

PBCS	705.08(g) (xi)	RCP 240 AND RSP 180 RCP 240 ET RSP 180	C-FAAA
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5.17 OTHER



5.17.1 Air Ambulance Operations (**AIR AMBULANCE**)

Description:

- (1) Air Ambulance Operations includes any services related to medical related transport, and can be conducted under Subparts 703, 704 or 705.
- (2) Air ambulance operations includes the following:
 - (a) Air Ambulance services;
 - The term “air ambulance” will be used throughout this section to refer to the transport of medical patients by air.
 - (b) Helicopter Emergency Medical Services (HEMS); and
 - (c) Human organ transfer services.

Note: Operators conducting Air Ambulance operations in Canada do not require this approval. However, this SA is available upon request by an operator, to satisfy any external CAA requirements.

- Per ICAO Annex 6, ICAO suggests that Air Ambulance operations be indicated on an AOC as a Type of Operation.
- Transport Canada encourages operators to request this SA if they conduct Air Ambulance operations within or outside Canada.

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	N/A	703.08(f)(ii)	704.08(f)(ii)	705.08(f)(ii)
CASS	--	N/A			
DOC(s)	Health and Welfare Canada, Medical Services Branch - <i>Patient Care in Flight, Manual for Medical Services Personnel</i> ; TP 7087; FAA AC 135-14B - <i>Helicopter Air Ambulance Operations</i>				

Guidance for Issuance:

COM Content:

- (1) The COM should contain guidance on the following, as applicable for the aircraft type:
 - (a) Communications procedures for the air ambulance flight watch;
 - (b) Approved method of restraining a stretcher, incubator, patient and/or any medical equipment transported;
 - (c) Stretcher or incubator installation;
 - (d) Patient orientation relative to the aircraft axis;
 - (e) Operational procedures as applicable to each type of aircraft;
 - (f) Medical attendant's duties and responsibilities;
 - (g) Assignment of a person responsible for restraining stretcher, incubator, patient and/or any required medical equipment in the aircraft;
 - (h) Assignment of a pilot to assist passengers in the cabin in the event of:
 - i. an emergency evacuation or in-flight incident involving fire or smoke in the cabin;
 - or



- ii. any incident threatening the safety of the aircraft or its occupants if a cabin attendant is not carried;
- (i) Assignment of a crew member to ensure the safety of passengers, and others approaching the aircraft, during disembarkment from a helicopter when the rotors are turning;
- (j) Procedures to ensure the following are conducted prior to flight;
 - i. Pre-flight briefing, to include information on seatbelts, emergency exits, main door operation, life-jackets, passenger safety card location, and use of cabin light switches;
 - ii. A visual check to ensure adequacy of stretcher or incubator installation and restraint, as well as patient restraint;
 - iii. A visual check to ensure any required medical equipment is adequately restrained;
 - iv. Procedures respecting completion of pre-takeoff and pre-landing cabin checks by a crew member;
 - v. Procedures respecting the stowage of carry-on baggage, equipment and cargo to ensure compliance with CAR 602.86;
 - vi. Evacuation procedures should be established for:
 - 1. The evacuation of a patient removed from a stretcher;
 - 2. The evacuation of a patient whose injuries prevent his/her release from the stretcher.
Note: Criteria shall be established for each aircraft type, to determine if a patient and stretcher can easily be evacuated from each exit on that aircraft; and
 - 3. Evacuation of an incubator;
Note: If it is determined that the incubator or stretcher will not fit through any one exit, such information shall be contained in the COM, and shall be included in the pre-flight briefing.

SOPs Developed / Amended:

Training Program Content:

Aircraft Performance:

Aircraft Equipment:

Aircraft Inspection:

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

Supporting Documentation:

Background Information:

Purpose & Regulations

- (1) An air ambulance service is considered by TCCA to be a commercial air service, except where the service is wholly owned and operated by a government agency and there is no direct charge to the patient.



- (2) There are no specific medevac regulations, but there are additional requirements beyond those stipulated for other operations, tied to the equipment, training and dispatch for these kinds of activity.
- (3) Although an air ambulance flight is, in theory, no different from any other transport flight, there are a number of unique aspects which require special consideration by both the air operator and the controlling or contracting agency.
 - (a) Many of these lie outside the responsibility of TCCA, and will only be referred to in their relationship to aviation safety.

Dangerous Goods Requirements

- (1) Air ambulances are subject to the *Transportation of Dangerous Goods Act, 1992*, the *Transportation of Dangerous Goods Regulations*, and the *ICAO Technical Instructions (ICAO TI)*.
 - (a) When an air ambulance transports dangerous goods without a patient, the full requirements of the *Act* and *Regulations* apply.
 - (b) When an air ambulance transports dangerous goods to provide, during flight, medical aid to a patient, certain exemptions from the *Act* and *Regulations* apply.
 - i. See section 1.48 *Air Ambulance Exemption* of the *Transportation of Dangerous Goods Regulations*.
 - (c) The *ICAO TI* do not apply to dangerous goods carried by an air ambulance, in accordance with Part 1;1.1.5.1.
 - (d) When a patient brings a medical article for personal use, including articles containing oxygen, on board as carry-on baggage, that article is subject to the *ICAO TI* Part 8;1.1.
 - (e) Where compressed oxygen or air cylinders are integral to the aircraft configuration, such installations shall be approved by the appropriate regional airworthiness authority.

Personnel

Pilots

- (1) Although most air ambulance flights are routine transfers of stabilized patients to higher care facilities, some are urgent missions with life or death consequences, often conducted at night or in marginal weather. These types of operations place a great deal of stress on pilots, who require mature judgment to avoid allowing their sense of mission accomplishment to override this reason.
 - (a) Agencies contracting for air ambulance services may wish to specify requirements over and above the minimum required by regulation, such as two pilots on all flights, additional training and experience, and the requirement for the air operator to maintain an approved list of those pilots authorized to fly aircraft supplied under the contract.
 - (b) Consideration should also be given to fatigue issues. Air ambulance pilots commonly are on standby for extended periods of time during their shifts. Operators should have a strategy for dealing with this aspect of the operation.

Medical Attendants

- (1) There are no *Canadian Aviation Regulations* specifying the conditions under which a medical attendant must be carried. Similarly, TCCA has no jurisdiction over the qualifications or training of medical attendants.
 - (a) The provincial authority or contracting agency should establish standards for medical personnel, and clearly define the criteria for their employment.
 - (b) It is recommended that all air ambulance flights carry a flight or medical attendant. A medical attendant should be an able-bodied person, physically capable of assisting the



patient to an exit in the event of an emergency, and who will attend to the personal needs of the patient in flight.

- (2) There is often some confusion regarding the status of medical attendants and their responsibilities relating to the operation of the aircraft.
 - (a) It should be clearly understood that medical attendants are not normally crew members under the *Canadian Aviation Regulations*. They may be designated as crew members provided they receive approved flight attendant training. In this case, medical attendants may be assigned duties such as passenger briefing, evacuation, and look-out for helicopter landings. Otherwise, these functions remain the responsibility of the flight crew.
- (3) Training in the aviation environment is desirable for medical personnel involved in air ambulance operations. Depending on whether the attendant is part of a dedicated service or accompanies patients on an occasional basis, this training will likely vary in length, but should at least include familiarity with the following:
 - (a) Meteorological weather conditions;
 - (b) Hypoxia;
 - (c) Hyperventilation;
 - (d) Effects of scuba diving;
 - (e) Effects of smoking and drugs;
 - (f) Hypothermia;
 - (g) G forces: positive and negative;
 - (h) Principles of protection against G force in an emergency landing or ditching;
 - (i) Patient evacuation;
 - (j) Problems with patient seat belt and traction devices during inflight turbulence;
 - (k) Effects of noise and vibration on the ill or injured;
 - (l) Difficulties encountered using “common” medical equipment in an aircraft environment;
 - (m) Helicopter emplaning and deplaning procedures;
 - (n) General aircraft safety rules; and
(Ref: TP 7087 - *Safety Guide for Aircraft Charter Passengers*)
 - (o) In-flight patient care.
(Ref: Health and Welfare Canada, Medical Services Branch - *Patient Care in Flight, Manual for Medical Services Personnel*).

Dispatchers and Coordinators

- (1) Air ambulances are usually controlled by a formalized system which encompasses tasking, priorities, communications, operational control, etc. One of the keys to the effectiveness of this system is the dispatcher or coordinator, used in this context as the air ambulance dispatcher, not the air operator's operations officer (although these positions may be combined).
- (2) Often, however, air ambulance dispatchers are part of the land ambulance system, and may not be knowledgeable about the aviation aspects of the service. Compounding this problem, many air ambulance flights are self-dispatched, particularly those of an urgent nature, thus the additional assistance that a pilot might receive from the flight operations manager may not be available. It is, then, imperative that the decision-making process leading to the dispatch of an air ambulance be clearly defined and understood by all involved.



- (3) Dispatchers should receive training in the following:
- (a) Weather reporting system;
 - (b) Weather limits for applicable aircraft types;
 - (c) Aircraft performance and capabilities;
 - (d) *Canadian Aviation Regulations* as applicable; and
 - (e) Air operator tasking procedures.

Medical Considerations

- (1) The first step leading to the assigning of an air ambulance is the decision by the medical authority (usually a physician or nurse) to move the patient by air. The changes associated with flying, however, may constitute an additional hazard for some patients. It is important that medical personnel are aware of the effect of the aviation environment on various conditions, and make their decision based on an established set of criteria.
- (2) Health and Welfare Canada has produced a manual "*Patient Care in Flight*" for the guidance of its Medical Services Personnel. This publication, or a similar one, should be available to those charged with initiating air ambulance service requests.

Helicopter Operations

- (1) Helicopter air ambulance operations conducted between airports or certified heliports are essentially no different from aeroplane operations.
- (2) Operations from austere or unprepared sites, however, do require special consideration. Although not common in Canada, some ambulance services may wish to be prepared for such a situation in the event of an emergency. Operations from such sites, particularly at night, require careful planning and a number of factors should be considered.
 - (a) FAA Advisory Circular 135-14B, entitled "Helicopter Air Ambulance Operations", provides a useful summary of these factors, some of which are outlined below:
 - i. A moveable search light on-board, capable of operation without the pilot having to remove his/her hands from the controls;
 - ii. Air to ground communications with persons on the landing site;
 - iii. Restraining devices for preventing patients from interfering with the flight controls (patients are less likely to be stabilized prior to transfer);
 - iv. An intercommunications system between flight crew and medical personnel;
 - v. A wire-strike protection system;
 - vi. Weather minima;
 - vii. Landing site evaluation procedures;
 - viii. Training of personnel in loading and unloading the helicopter with rotors turning; and
 - ix. Training of at-the-scene ground personnel (involves police, ambulance attendants etc. in landing site selection and marking; weather estimation, hazards to landing, loading, etc.).

Airworthiness

- (1) All medical equipment carried on board aircraft being operated as air ambulances is subject to TCCA airworthiness approval.

Carriage of Incubators and Stretchers



- (1) This guidance is applicable to temporary installations on aircraft being operated as air ambulances, using:
 - (a) large aircraft carrying flight attendants;
 - (b) small aircraft without flight attendants; and
 - (c) helicopters without flight attendants.
- (2) The guidance also takes into consideration that some flights may be operating solely on an air ambulance mission, while others may be operating on regular scheduled services.

Stretcher or Incubator Installation

- (1) The stretcher or incubator installation shall not:
 - (a) interfere with any operation of any aircraft controls;
 - (b) restrict access to, or the use of, regular exits;
 - (c) obstruct any emergency exit, or the aisle(s) leading to an emergency exit;
 - (d) restrict access to emergency equipment; and
- (2) The stretcher or incubator should be so arranged as to allow ready access by accompanying medical personnel to perform monitoring and therapy functions when needed.

Restraint Systems

- (1) All stretcher or incubator restraint systems require Transport Canada (Airworthiness) approval.
- (2) The attachment of the stretcher or incubator to the aircraft structure shall allow its rapid detachment for evacuation.

Patient Restraint

- (1) All patient restraint systems require TC (Airworthiness) approval.
- (2) Each patient restraint system shall have a quick-release means to allow its rapid detachment in an evacuation.

Note: Some patients may be so injured that the restraint system used will be based on a medical opinion, and may not meet this requirement. However, this type of medical evacuation would be very unusual.

Note: An emergency situation involving a patient who is unable to be restrained on a stretcher prior to being stabilized is very rare. However, should this occur, the patient should be transported on a flight whose sole purpose is the medical evacuation.

- (3) Operators should include any procedures concerning patient restraint considerations relevant to their operations in their COM.

Patient Orientation

- (1) The preferred orientation of the patient is to have their head towards the front of the aircraft, so that most of the forward loads applied by the patient restraint system are applied on the shoulder area.
 - (a) In an aeroplane, the patient should be placed fore and aft along the longitudinal axis.
 - (b) For helicopters, the preferred orientation is the same as aeroplanes. However, due to the different structural configuration and possible crash scenarios, this may not be feasible.
- (2) Operators should include any procedures concerning orientation considerations, as relevant to the aircraft types operated, in their COM.



Medical Attendant

- (1) While not specifically required by regulation, all patients (particularly those confined to a stretcher or babies in incubators) should be accompanied by a medical attendant.
- (2) Attendants should be assigned a seat which is convenient to their patient, incubator oxygen supply, and restraint.

Oxygen System for Patients

- (1) An incubator may feature a self-contained oxygen supply capable of delivering a controllable flow rate.
- (2) An adequate supply of oxygen normally will be provided by the medical authorities.
 - (a) The aircraft oxygen system shall not be used for this purpose.
 - (b) If extra oxygen cylinders are to be carried, they shall have protective containers and be capable of being appropriately restrained in a manner acceptable to TC.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

AIR AMBULANCE AMBULANCE AÉRIENNE	705.08(f) (ii)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.2 DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY – UNCONTROLLED AIRSPACE – AEROPLANES

Description:

- (1) Approval to conduct VFR operations with aeroplanes in uncontrolled airspace at less than 1000 feet AGL, when the visibility is less than two miles, but not less than one mile, under conditions that will lead to an equivalent level of safety for that operation.
- (2) Previously known as:
 - (a) *“Operations Specification 041 - Day VFR Flight Minimum Flight Visibility - Within Uncontrolled Airspace – Aeroplanes” (702)*
 - (b) *“Operations Specification 004 - Day VFR, Minimum Flight Visibility - Within Uncontrolled Airspace – Aeroplanes” (703)*

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	702.17(1)	703.28(1)	N/A	N/A
CASS	--	722.17, 722.82(3)(h)	A723.28, A723.105(1)(k-k), (2)(z) &(3)(i)	N/A	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

Training Program Content:

- (1) Pilot Decision Making (PDM) Course

Note: This training is transferable. If a pilot has certified proof of attendance at a PDM Course while employed at another air operator, there will be no requirement for the current employer to provide the training.

Note: PDM training received as part of the Commercial Pilot Licence ground training syllabus does not meet this requirement.

- (2) Additional dedicated PDM training must be received

- (3) Basic IF Training

Note: Holders of a current instrument rating will be considered as having met this requirement.

- (4) The air operator will not have to provide the one hour of training required by the applicable standard.

Simulator Training:

Aircraft Equipment:

- (1) The GPS receiver may be certified for VFR use only.

- (a) There is no requirement that the receiver comply with TSO C129 for operations under IFR.

Aircraft Inspection:

NACIS Guidance:



Example as Depicted in the Operations Specifications:

DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE - AEROPLANES VISIBILITÉ EN VOL MINIMAL EN VOL VFR DE JOUR - ESPACE AÉRIEN NON CONTRÔLE - AVIONS	702.17(1) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.3 DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY – UNCONTROLLED AIRSPACE – HELICOPTERS

Description:

- (1) This SA permits the operation of a helicopter in day VFR flight within uncontrolled airspace at less than 1,000 feet AGL, when flight visibility is less than one mile, but not less than 1/2 mile.
- (2) Previously known as:
 - (a) “Operations Specification 401 - VFR, Flight Minimum Flight Visibility - Within Uncontrolled Airspace – Helicopters” (604).
 - (b) “Operations Specification 042 - Day VFR Flight Minimum Flight Visibility - Within Uncontrolled Airspace – Helicopters” (702).
 - (c) “Operations Specification 005 - Day VFR, Minimum Flight Visibility - Within Uncontrolled Airspace – Helicopters” (703).
 - (d) “Operations Specification 020 - VFR, Flight Minimum Flight Visibility - Within Uncontrolled Airspace – Helicopters” (704).

Note: This SA does not apply to helicopters operated in accordance with offshore flights conducting SAR operations. These types of operations must have an exemption or SA [currently in development] to descend below 1000 feet and operate in visibilities down to ¼ mile.

Requirements:

Subpart	604*	702	703	704	705
CAR	604.74	702.17(2)	703.28(2)	704.24	N/A
CASS	--	722.17, 722.82(1)(j)(m)(n)(c-c)(ii), (2)(j)(k)(y), (3)(h)	H723.28, H723.105(1)(n)(p), (2)(i)(j), (3)(i)	H724.24, H724.121(j)(f-f)	N/A
DOC(s)	AC 401-004, AC 602-002, TP 3077				

* 604 authorization is pursuant to the operator adhering to the standards set out in CASS 723.28

Guidance for Issuance:

COM Content:

Training Program Content:

- (1) to reflect the requirements of Basic Instrument Flying skills and currency.
- (2) to ensure all requirements to conduct Minimum Flight Visibility are complete.
 - (a) Instrument Flying Skills (in addition to (1), above):
 - i. Those pilots who do not hold an Instrument Rating must also conduct the relevant flight training to achieve basic instrument flying skills, as described in the “Instrument Flying” exercises listed in TP3077 *Flight Test Guide Private and Commercial Helicopter Licence*
 - ii. Training as required to confer the ability to select and land in a suitable location (the purpose of which is to safely wait for VFR conditions).
 - (b) Instrument Rating:



- i. Pilots with a Group IV instrument rating may conduct an IPC (Instrument Proficiency Check) in accordance with AC401-004 annually instead of the training detailed in item (a), above.

Simulator Training:

- (1) Operators may develop training plans incorporating an FTD (Flight Training Device) or FFS (Full Flight Simulator).

Aircraft Equipment:

- (1) Helicopters must be equipped with a serviceable “six pack” of flight instruments, consisting of airspeed indicator, a sensitive altimeter adjustable for barometric pressure, vertical speed indicator, gyroscopic pitch-bank (attitude indicator), a stabilized magnetic direction indicator or a gyroscopic direction indicator, and rate of turn indicator incorporating a slip-skid indicator.

NACIS Guidance:

Example as Depicted in the Operations Specifications:

DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE - HELICOPTERS VISIBILITÉ EN VOL MINIMAL EN VOL VFR DE JOUR - ESPACE AÉRIEN NON CONTRÔLE - HÉLIOPTÈRES	703.28(2) (a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.4 NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES

Description:

- (1) This SA allows a operator to conduct IFR flights where an alternate aerodrome has not been designated in the IFR flight plan or in the IFR flight itinerary.
- (2) Previously known as:
 - (a) “Operations Specification 402 – No Alternate Aerodrome IFR Flight” (604).
 - (b) “Operations Specification 025 – No Alternate Aerodrome IFR Flight” (704).
 - (c) “Operations Specification 064 – No Alternate Aerodrome IFR Flight” (705).
 - (d) “Operations Specification 078 – No Alternate Aerodrome IFR Flight (<= 6 Hrs)” (705).
 - (e) “Operations Specification 079 – No Alternate Aerodrome IFR Flight (6-8 Hrs)” (705).

Requirements:

Subpart	604	702	703	704	705
CAR	604.48	N/A	N/A	704.27	705.35
CASS	--	N/A	N/A	A724.27	725.35
DOC(s)					

Guidance for Issuance:

COM Content:

- (1) Operational Control System verified suitable by the CASI

Training Program Content:

NACIS Guidance:

Example as Depicted in the Operations Specifications:

NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES VOL IFR SANS AERODROME DE DEGAGEMENT – AVIONS	705.35(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.5 NO ALTERNATE AERODROME - IFR FLIGHT - HELICOPTERS

Description:

(1) This SA allows an operator to conduct an IFR flight where an alternate aerodrome has not been designated in the IFR flight plan or in the IFR flight itinerary.

(2) Previously known as:

(a) “Operations Specification 009 – No Alternate Aerodrome IFR Flight – Helicopters”.

Requirements:

Subpart	604	702	703	704	705
CAR	604.48	N/A	703.31	704.27	N/A
CASS	--	N/A	H723.31	H724.27	N/A
DOC(s)					

Guidance for Issuance:

COM Content:

(1) To reflect the requirements of CASS 723.31(a) or 724.27(a).

(2) CASI to verify the flight is operated under a Type C Operational Control System.

Training Program Content:

(1) To reflect the requirements of CASS 723.31(c)&(d) or 724.27(c)&(d).

NACIS Guidance:

Example as Depicted in the Operations Specifications:

NO ALTERNATE AERODROME - IFR FLIGHT - HELICOPTERS VOL IFR SANS AÉRODROME DE DÉGAGEMENT – AVIONS	703.31(a)		ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.6 Night Vision Imaging Systems Operations (NVIS)

Description:

- (1) Approval to conduct operations using Night Vision Imaging Systems (NVIS).
- (2) Previously known as:
 - (a) *“Operations Specification 603 – Aviators Night Vision Imaging System Operations (NVIS)”*.

Requirements:

Subpart	604	702	703	704	705
CAR	604.74	702.08(g)(xii)	703.08(g)(x)	704.08(g)(xi)	705.08(g)(xi)
CASS					
DOC(s)	AC 521-004, AC 603-001 v4, SI 513-001				

Guidance for Issuance:

Note: See AC 603-001, version 4, for specific guidance information

COM Content:

SOPs developed / amended:

Training Program Content:

Aircraft Equipment:

Aircraft Inspection:

- (1) An NVIS STC inspection must be carried out by Airworthiness and National Aircraft Certification Test Pilots, in accordance with AC 521-004 and SI 513-011.

Maintenance Approval / Acceptance:

Maintenance Schedule Amendment:

NACIS Guidance:

- (1) This approval has to include Basic or Advanced NVIS capability limits.
 - (a) The **“DESCRIPTION”** section contains a pull-down field that must be selected for one of the following options:
 - i. **“Basic – take-off/landing from unlit published or established aerodromes”;**
 - ii. **“Basic – routes in uncontrolled airspace along established routes, CAR altitudes & distances”;**
 - iii. **“Basic – PIC not IR rated, aircraft operated by 2 NVIS qualified pilots”;**
 - iv. **“Advanced – entering/leaving a helicopter in flight at night”;**
 - v. **“Advanced – take-off/landing from unlit published, established or ad-hoc aerodromes”;**
 - vi. **“Advanced – Class B, C or D external loads at night”;**
 - vii. **“Advanced - routes in uncontrolled airspace along established or ad-hoc routes, reduced alt./dist.”;** or
 - viii. **“Advanced - PIC not IR rated, min. 1 NVIS qualified pilot (and 1 NVIS crew for ad-hoc aerodromes)”**.

Note: “Advanced” capabilities encompass “Basic” capabilities of the same type.



1. “Advanced - take-off/landing from unlit...” covers the privileges associated with “Basic – take-off/landing from unlit...”
2. “Advanced - routes in uncontrolled airspace....” covers the privileges associated with “Basic – routes in uncontrolled airspace....”
3. “Advanced - PIC not IR rated....” covers the privileges associated with “Basic – PIC not IR rated....”

(2) Where there are different capabilities required for different aircraft, there are two options:

(a) The preferred option is to select the SA “**Night Vision Imaging Systems Operations (NVIS)**”, choose the applicable aircraft in the “**Type Designator(s)**” and “**Registered Aircraft**” fields, and then select the appropriate capability in the “**DESCRIPTION**” field drop-down list (i.e.; only one capability is chosen).

- i. If there are aircraft exclusions that need to be noted, add them to the “**REMARKS**” field using the free text option, noting the aircraft type and registration, and its capability.

Note: Free text entries have limited character length. The option to use the SA “**REGISTRATION MARKS**”, can also be used (see section 3.2.5(6)a “Note”, in this volume), where aircraft can be grouped into a make/model/series for each capability.

(b) For operators that have large numbers of aircraft that can be grouped under multiple common capabilities, each group of aircraft can be listed under a separate “**Night Vision Imaging Systems Operations (NVIS)**” SA.

- i. There are six SA’s containing the text “Night Vision Imaging Systems Operations (NVIS)”; they are specifically labelled “**Night Vision Imaging Systems Operations (NVIS)**”, “**Night Vision Imaging Systems Operations (NVIS) #2**”, “**Night Vision Imaging Systems Operations (NVIS) #3**”, etc.

1. The first group of aircraft can be contained in the “**Night Vision Imaging Systems Operations (NVIS)**” SA (as per (2)a., above), and the “**DESCRIPTION**” field should be selected for the first capability.
2. The second group of aircraft can be added to the second SA “**Night Vision Imaging Systems Operations (NVIS) #2**”, and the “**DESCRIPTION**” field should contain the second capability.
3. “**Night Vision Imaging Systems Operations (NVIS) #3**”, etc., can be used for other groups with other capabilities (as required).

- ii. Where aircraft groupings cannot contain enough detail within the six possible SA’s (each with a discrete capability in the “**DESCRIPTION**” field), the exclusion methodology mentioned in (2)(a)i., above, can also be used.

(3) Where an operator has one aircraft (or one type of aircraft) that has multiple capabilities, each aircraft (or type) will need to be listed on multiple individual “**Night Vision Imaging Systems Operations (NVIS)**” SA’s. This is because NACIS does not allow for multiple selection of **DESCRIPTIONs** within one SA entry.

- (a) Proceed as per (2)(b) above, ignoring the reference to “group”, and substituting “capability” when reading the guidance.

Example as Depicted in the Operations Specifications:

NVIS	704.08(g) (xi)	Advanced - entering/leaving a helicopter in flight at night Avancée - embarquement/débarquement d'un hélicoptère en vol de nuit	ALL AIRCRAFT TOUS LES AÉRONEFS
SIVN			



5.17.7 OPERATIONS BETWEEN POINTS ABROAD

Description:

- (1) Approval to conduct operations between points abroad.
- (2) This SA is required when an operator conducts operations on behalf of a tour operator, or themselves, between foreign points.
 - (a) This includes operations from and back to the same foreign point.
 - (b) This applies to a route between points outside of Canada, not between Canada and another state.
 - (c) This is required for operations between points abroad for any length of time;

Requirements:

Subpart	604	702	703	704	705
CAR	N/A	700.08	700.08	700.08	700.08
CASS	--	720.08	720.08	720.08	720.08
DOC(s)	AN No. B033, ICAO Doc 8335				

Guidance for Issuance:

COM Content:

- (1) The operator needs to prove to TCCA that they have adequate operational control for the operations outside of Canada.

Base Inspection:

- (1) If new bases are added to the AOC, a base inspection will likely have to be conducted.

Maintenance Approval / Acceptance:

- (1) Maintenance arrangements must be approved in accordance with Airworthiness Notice (AN) No. B033 *Maintenance Requirements for the Issuance of Extended Charter and Points Abroad Operational Authority*.

Background Information:

- (1) ICAO requirements demand that oversight and surveillance be maintained on aircraft registered in one country and operating internationally.
 - (a) The country of registration is responsible for ensuring that the aircraft are operated in accordance with the regulations and requirements attached to the issuance of the AOC.
 - (b) Although these responsibilities can be delegated to the country of operations through an MOU, the responsibility for the oversight and surveillance of the operator rests with the country of registration.
 - i. This oversight requires keeping track of the base of operations as a means of ensuring the aircraft are operating in accordance with the applicable regulations.

NACIS Guidance:

- (1) The “DESCRIPTION” section contains a mandatory pull-down field that must be selected.
 - (a) For this SA, there is only one option:
 - i. “Points:”.



- (b) Once the above is selected, the free text field below the pull-down becomes available for use to enter the following:
- The names of the foreign points; then
 - “Operating period from”**; then
 - the date the service begins; then
 - “until”**; and
 - the expiry date.
- (2) The **“REMARKS”** section can be used for further free text entries, if required.
- (1) There are two **“OPERATION BETWEEN POINTS ABROAD”** SA’s: they are labelled **“OPERATION BETWEEN POINTS ABROAD”**, and **“OPERATION BETWEEN POINTS ABROAD #2”**.
- Use the SA **“OPERATION BETWEEN POINTS ABROAD”** first.
 - If free field space in the **“DESCRIPTION”** and/or **“REMARKS”** section of the SA isn’t adequate to contain all details on the operation, the second SA **“OPERATION BETWEEN POINTS ABROAD #2”** can be used to continue the details.

Example as Depicted in the Operations Specifications:

OPERATIONS BETWEEN POINTS ABROAD EXPLOITATION ENTRE POINTS À L'ÉTRANGER	700.08(a)	Points: Name of Point A, Name of Point B, and Name of Point C. Operating period from 2020-01- 01 until 2020-12-31. Période d'exploitation à partir de 2020-01-01 jusqu'à 2020-12-31.	ALL AIRCRAFT TOUS LES AÉRONEFS
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5.17.8 REGISTRATION MARKS

Description:

- (1) This SA is to be used, as required, to record aircraft registration marks associated with each make/model/series (or master series).
- (2) This SA:
 - (a) supplements other operations specifications;
 - (b) will be most useful where an operator has a large number of registered aircraft, all falling under more than one make/model/series (or master series); and
 - (c) is not mandatory.

Note: This SA will be removed once a future NACIS re-design incorporates aircraft registration mark choices into the Mandatory Approval section of the AOC.

Requirements:

Subpart	604	702	703	704	705
CAR		702.08(f)(iii)	703.08(f)(iii)	704.08(f)(iii)	705.08(f)(iii)
CASS					
DOC(s)					

Guidance for Issuance:

- (1) This SA is an administrative tool to be used in conjunction with the issuance of other SA's.
 - (a) The aircraft registrations will come from the pre-populated lists contained within NACIS, based on aircraft registered to the operator.
 - (b) There is no fee associated with the issuance of this SA.

NACIS Guidance:

- (1) There are a number of versions of this SA, all containing the wording "**REGISTRATION MARKS**"; they are labelled "**REGISTRATION MARKS**", "**REGISTRATION MARKS #2**", "**REGISTRATION MARKS #3**", etc.
 - (a) Where the operator has multiple registrations marks that need to be associated with one aircraft make/model/series (or master series), the numbered versions of each SA can be assigned to each make/model series (or master series) group.
 - i. Select the SA "**REGISTRATION MARKS**", choose the applicable aircraft in the "**Type Designator(s)**" and "**Registered Aircraft**" fields.

Note: The "**REMARKS**" field will be auto-populated with the aircraft make/model/series (or master series), followed by the registration marks, based upon the aircraft "**Type Designator(s)**" and "**Registration Marks**" field entries.

Example as Depicted in the Operations Specifications:



REGISTRATION MARKS MARQUES D'IMMATRICULATION	705.08(f) (iii)		AIRCRAFT / AÉRONEFS : DHC6 - DE HAVILLAND DHC6 200 (200) C-AAAA C-BBBB
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Appendix A – ICAO Annex 6 Operations Specification Form

OPERATIONS SPECIFICATIONS (subject to the approved conditions in the operations manual)				
ISSUING AUTHORITY CONTACT DETAILS ¹				
Telephone: _____		Fax: _____		Email: _____
AOC# ² : _____		Operator name ³ : _____		Date ⁴ : _____ Signature: _____
Dba trading name ³ : _____				
Aircraft model ⁵ : _____				
Types of operation: Commercial air transportation <input type="checkbox"/> Passengers <input type="checkbox"/> Cargo <input type="checkbox"/> Other ⁶ : _____				
Area(s) of operation ⁷ : _____				
Special limitations ⁸ : _____				
SPECIFIC APPROVAL	YES	NO	DESCRIPTION ⁹	REMARKS
Dangerous goods	<input type="checkbox"/>	<input type="checkbox"/>		
Low visibility operations				
Approach and landing	<input type="checkbox"/>	<input type="checkbox"/>	CAT ¹⁰ : _____ RVR: _____ m DH: _____ ft	
Take-off	<input type="checkbox"/>	<input type="checkbox"/>	RVR ¹¹ : _____ m	
Operational credit(s)	<input type="checkbox"/>	<input type="checkbox"/>	¹²	
RVSM ¹² <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>		
EDTO ¹⁴ <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	Threshold time ¹⁵ : _____ minutes Maximum diversion time ¹³ : _____ minutes	
AR navigation specifications for PBN operations	<input type="checkbox"/>	<input type="checkbox"/>	¹⁶	
Continuing airworthiness	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	¹⁷	
EFB	<input type="checkbox"/>	<input type="checkbox"/>	¹⁸	
Other ¹²	<input type="checkbox"/>	<input type="checkbox"/>		

Notes.—

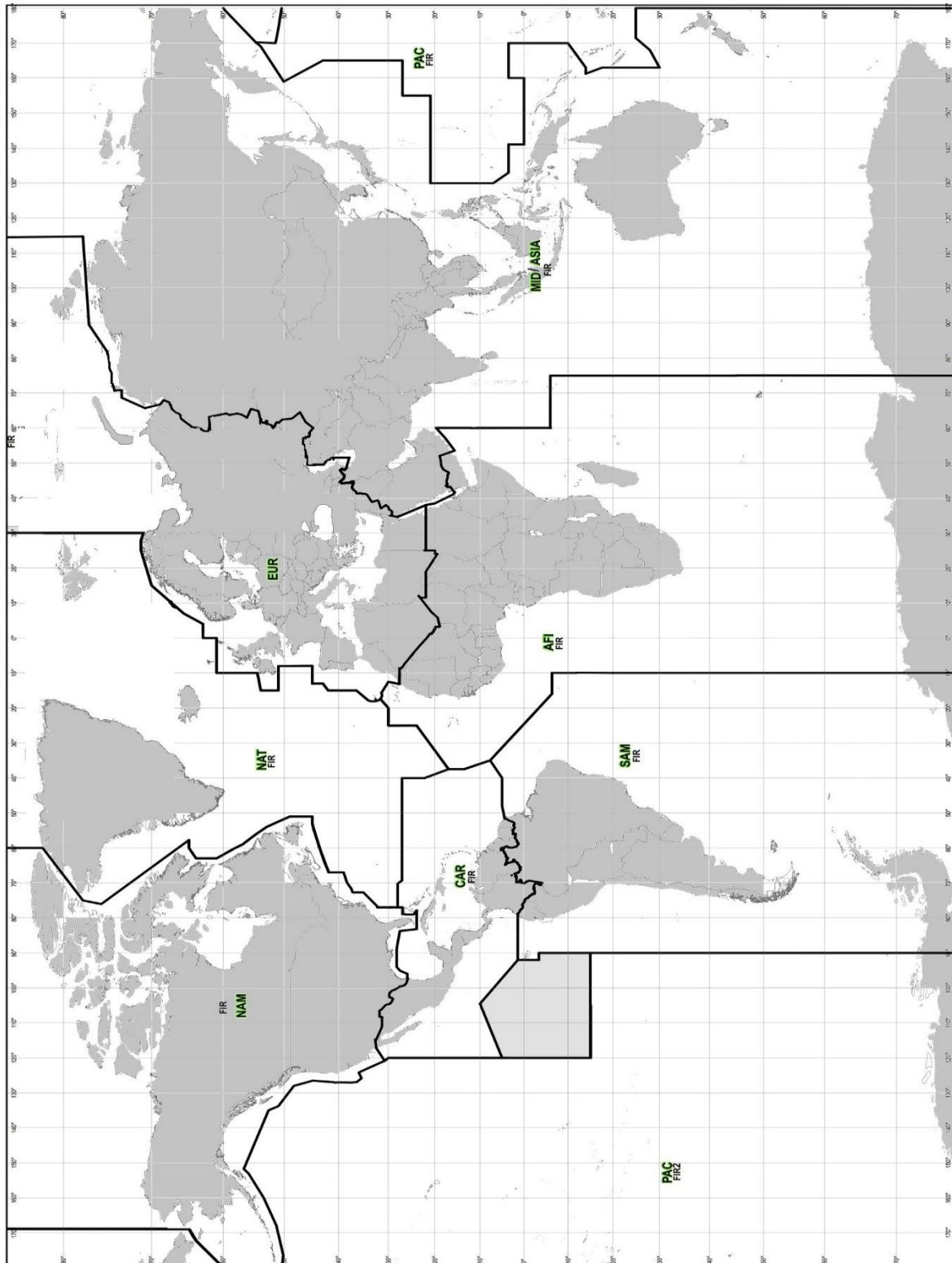
1. Telephone and fax contact details of the authority, including the country code. Email to be provided if available.
2. Insert the associated AOC number.
3. Insert the operator's registered name and the operator's trading name, if different. Insert "dba" before the trading name (for "doing business as").
4. Issuance date of the operations specifications (dd-mm-yyyy) and signature of the authority representative.



5. Insert the Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Boeing-737-3K2 or Boeing-777-232). The CAST/ICAO taxonomy is available at: <http://www.intlaviationstandards.org/>.
6. Other type of transportation to be specified (e.g. emergency medical service).
7. List the geographical area(s) of authorized operation (by geographical coordinates or specific routes, flight information region or national or regional boundaries).
8. List the applicable special limitations (e.g. VFR only, day only).
9. List in this column the most permissive criteria for each approval or the approval type (with appropriate criteria).
10. Insert the applicable precision approach category (CAT II, IIIA, IIIB or IIIC). Insert the minimum RVR in metres and decision height in feet. One line is used per listed approach category.
11. Insert the approved minimum take-off RVR in metres. One line per approval may be used if different approvals are granted.
12. List the airborne capabilities (i.e. automatic landing, HUD, EVS, SVS, CVS) and associated operational credit(s) granted.
13. "Not applicable (N/A)" box may be checked only if the aircraft maximum ceiling is below FL 290.
14. If extended diversion time operations (EDTO) approval does not apply based on the provisions in Chapter 4, 4.7, select "N/A". Otherwise a threshold time and maximum diversion time must be specified.
15. The threshold time and maximum diversion time may also be listed in distance (NM), as well as the engine type.
16. Performance-based navigation (PBN): one line is used for each PBN AR navigation specification approval (e.g. RNP AR APCH), with appropriate limitations listed in the "Description" column.
17. Insert the name of the person/organization responsible for ensuring that the continuing airworthiness of the aircraft is maintained and the regulation that requires the work, i.e. within the AOC regulation or a specific approval (e.g. EC2042/2003, Part M, Subpart G).
18. List the EFB functions with any applicable limitations.
19. Other authorizations or data can be entered here, using one line (or one multi-line block) per authorization (e.g. special approach authorization, MNPS, approved navigation performance).



Appendix B – ICAO Areas of Operation Map





Appendix C – Current SA Name to Old Ops Spec #

Current SA Name in NACIS	Old Ops Spec #
Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	ops spec 609 - Subpart 702 ops spec 609 - Subpart 703 ops spec 609 - Subpart 704 ops spec 609 - Subpart 705 ops spec 610 - Subpart 701
ADVANCED QUALIFICATION PROGRAM	ops spec 072 - Subpart 705
AEROPLANE GROUPING FOR PPC PURPOSES	ops spec 057 - Subpart 702 ops spec 012 - Subpart 703 ops spec 032 - Subpart 704
Aircraft Network Security Program (ANSP)	
AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD	ops spec 043
AIRCRAFT OPERATING OVER WATER – HELICOPTERS	ops spec 045 - Subpart 702 ops spec 002 - Subpart 703
APPROACH BAN OPERATIONS - AEROPLANES	ops spec 019 - Subpart 703 ops spec 303 - Subpart 704 ops spec 503 - Subpart 705
CAPACITY PURCHASE AGREEMENT	
CARRIAGE OF PERSONS	ops spec 040
CATEGORY I - II - III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES	ops spec 059 - Subpart 705
CATEGORY I - ILS APPROACHES TO A DH 100' - HELICOPTERS	ops spec 035
CATEGORY II - INSTRUMENT APPROACHES	ops spec 016 - Subpart 703 ops spec 026 - Subpart 704 ops spec 065 - Subpart 705 ops spec 087 - Subpart 701 ops spec 405 - Subpart 604
CATEGORY III - INSTRUMENT APPROACHES	ops spec 036 - Subpart 704 ops spec 088 - Subpart 701 ops spec 408 - Subpart 604 ops spec 076 - Subpart 705
Canadian Minimum Navigation Performance Specifications (CMNPS)	ops spec 037 - Subpart 704 ops spec 077 - Subpart 705 ops spec 081 - Subpart 701 ops spec 407 - Subpart 604
Continuing Airworthiness	
Dangerous Goods (DG)	
DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – AEROPLANES	ops spec 041 - Subpart 702 ops spec 004 - Subpart 703
DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – HELICOPTERS	ops spec 042 - Subpart 702 ops spec 005 - Subpart 703 ops spec 020 - Subpart 704 ops spec 401 - Subpart 604
DHC-6 TWIN OTTER – REDUCED GROUND ROLL (RGR) TAKE-OFF	
Electronic Flight Bag (EFB)	
ENTERING OR LEAVING A HELICOPTER IN FLIGHT	ops spec 044 - Subpart 702
EXCEPTIONS TO OPERATING LIMITATIONS – CONTAMINATED RUNWAYS	ops spec 067 - Subpart 705
EXCEPTIONS TO OPERATING LIMITATIONS - RECIPROCATING ENGINES - CARGO ONLY	ops spec 073 - Subpart 705



EXCEPTIONS TO OPERATING LIMITATIONS – TAKE-OFF WEIGHT – ACCELERATE-STOP DISTANCE	ops spec 074
EXTENDED CHARTER	ops spec 090
Extended Range Twin-Engined Operations (ETOPS)	ops spec 061 - Subpart 705 ops spec 080 - Subpart 701
FLIGHT ATTENDANT SEAT	ops spec 066 - Subpart 705
FLIGHT CREW MEMBER QUALIFICATIONS	ops spec 013 - Subpart 703 ops spec 033 - Subpart 704 ops spec 071 - Subpart 705
FUEL REQUIREMENTS - EN ROUTE FUEL RESERVE REDUCTION	ops spec 060 - Subpart 705
HELICOPTER CLASS B, C OR D EXTERNAL LOAD - BUILT-UP AREA OR AERIAL WORK ZONE	ops spec 050 - Subpart 702
HELICOPTER CLASS B, C OR D EXTERNAL LOAD - NIGHT, VFR OTT OR IFR	ops spec 051 - Subpart 702
HELICOPTER CLASS D EXTERNAL LOAD – MULTI-ENGINE (OEI CAPABLE)	ops spec 046 - Subpart 702
HELICOPTER CLASS D EXTERNAL LOAD (LIMITED) – SINGLE OR MULTI-ENGINE (NOT OEI CAPABLE)	ops spec 047 - Subpart 702
INCREASE IN FLIGHT DUTY PERIOD	ops spec 093 - Subpart 700 ops spec 406 - Subpart 604
INCREASE IN FLIGHT TIME	ops spec 092
INSTRUMENT APPROACH PROCEDURES - MISSED APPROACH CLIMB GRADIENTS GREATER THAN 425 FT/NM	
INSTRUMENT PROCEDURES - HELICOPTER PROCEDURES OFFSHORE – RNAV (GNSS) /AIRBORNE RADAR APPROACHES (ARA)	
INSTRUMENT PROCEDURES – RCAP - BILLY BISHOP – RNAV (GNSS) X - RWY 26	
INSTRUMENT PROCEDURES - RCAP - BILLY BISHOP - RNAV (GNSS) Y - RWY 08	
INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - RNP AR PROCEDURES	ops spec 605
INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - HELICOPTERS	ops spec 606
INSTRUMENT PROCEDURES - RCAP - STANDARD RESTRICTED INSTRUMENT PROCEDURES	ops spec 099 - Subpart 700 ops spec 410 - Subpart 604
Land and Hold Short Operations (LAHSO)	ops spec 617
MANAGEMENT AGREEMENT	ops spec 091
MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS	ops spec 010 - Subpart 703 ops spec 027 - Subpart 704
MINIMUM CREW WITHOUT A SECOND-IN-COMMAND	ops spec 011 - Subpart 703 ops spec 089 - Subpart 701 ops spec 202 - Subpart 701
CUSMA - SPECIALTY AIR SERVICES (AERIAL WORK) OPERATIONS	ops spec 056 - Subpart 702 ops spec 205 - Subpart 701 ops spec 206 - Subpart 701
North Atlantic – High Level Airspace Operations (NAT HLA)	ops spec 037 - Subpart 704 ops spec 077 - Subpart 705 ops spec 081 - Subpart 701 ops spec 407 - Subpart 604
NET TAKE-OFF FLIGHT PATH - GREATER BANK ANGLE	ops spec 031 - Subpart 704 ops spec 068 - Subpart 705
NET TAKE-OFF FLIGHT PATH - VISUAL OBSTACLE AVOIDANCE	ops spec 075 - Subpart 705
NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	ops spec 025 - Subpart 704 ops spec 064 - Subpart 705



	ops spec 078 - Subpart 705 ops spec 079 - Subpart 705 ops spec 083 - Subpart 701 ops spec 402 - Subpart 604
NO ALTERNATE AERODROME - IFR FLIGHT - HELICOPTERS	ops spec 009
NUMBER OF PASSENGERS IN SINGLE-ENGINED HELICOPTERS	ops spec 003 - Subpart 702
Night Vision Imaging Systems Operations (NVIS)	ops spec 603
OPERATION BETWEEN POINTS ABROAD	
OPERATION OF AN AIRCRAFT OVER A BUILT-UP AREA	ops spec 049
Performance Based Communication and Surveillance Operations (PBCS)	
PROGRAM OF CONTROLLED REST ON THE FLIGHT DECK	ops spec 095
REGISTRATION MARKS	
Area Navigation 1 and 2 (RNAV 1 AND 2)	ops spec 612
Area Navigation 5 (RNAV 5)	ops spec 613
Required Navigation Performance 1 (RNP 1)	ops spec 618
Required Navigation Performance 2 (RNP 2 (CONTINENTAL))	
Required Navigation Performance 4 Airspace (RNP 4)	ops spec 614
Required Navigation Performance 10 Airspace (RNP 10)	ops spec 611 - Subpart 705 ops spec 611 - Subpart 701
Required Navigation Performance Approach (RNP APCH)	ops spec 100 - Subpart 700 ops spec 620
Required Navigation Performance Authorization Required Approach (RNP AR APCH)	ops spec 621
Required Navigation Performance Radius To Fix Path Terminator (RNP – RADIUS TO FIX (RF) PATH TERMINATOR)	ops spec 623
Required Navigation Performance Capability (RNP)	ops spec 052 - Subpart 702 ops spec 015 - Subpart 703 ops spec 037 - Subpart 704 ops spec 077 - Subpart 705
Required Navigation Performance Capability High Level Fixed Area Navigation Routes (RNP – HIGH LEVEL FIXED RNAV ROUTES)	
Reduced Vertical Separation Minima (RVSM)	
SA CAT II	
SIMULTANEOUS OPERATIONS IFR APPROACHES - GLS/ILS/LDA/RNAV PRM AND SOIA	ops spec 602
TAKE-OFF APPROACH OR LANDING WITHIN A BUILT-UP AREA	ops spec 048
TAKE-OFF IN IMC - WEATHER BELOW LANDING MINIMA	ops spec 006 - Subpart 703 ops spec 021 - Subpart 704
TAKE-OFF MINIMA - REPORTED VISIBILITY BELOW RVR 600' DOWN TO AND INCLUDING RVR 300'	
TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	ops spec 024 - Subpart 704 ops spec 063 - Subpart 705 ops spec 085 - Subpart 701 ops spec 403 - Subpart 604
TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - HELICOPTERS	ops spec 014 - Subpart 703 ops spec 024 - Subpart 704 ops spec 086 - Subpart 701 ops spec 403 - Subpart 604
TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' - (1/4 MILE)	ops spec 062 - Subpart 705 ops spec 084 - Subpart 701 ops spec 404 - Subpart 604
TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	ops spec 055 - Subpart 702 ops spec 007 - Subpart 703 ops spec 022 - Subpart 704



**Appendix C - Current SA Name
to Old Ops Spec #**



TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	ops spec 058 - Subpart 702 ops spec 008 - Subpart 703 ops spec 023 - Subpart 704
TIME FREE FROM DUTY	ops spec 094
TRANSPORT OF PASSENGERS OPERATING SINGLE-ENGINE AEROPLANES - IFR OR NIGHT VFR FLIGHT	ops spec 001- Subpart 703



Appendix D – Old Ops Spec # to Current SA Name

Old Ops Spec #	Current SA Name in NACIS	Subpart
1	TRANSPORT OF PASSENGERS OPERATING SINGLE -ENGINEED AEROPLANES - IFR OR NIGHT VFR FLIGHT	703
2	AIRCRAFT OPERATING OVER WATER – HELICOPTERS	703
3	NUMBER OF PASSENGERS IN SINGLE -ENGINEED HELICOPTERS	703
4	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – AEROPLANES	703
5	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – HELICOPTERS	703
6	TAKE-OFF IN IMC - WEATHER BELOW LANDING MINIMA	703
7	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	703
8	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	703
9	NO ALTERNATE AERODROME - IFR FLIGHT - HELICOPTERS	703
10	MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS	703
11	MINIMUM CREW WITHOUT A SECOND-IN-COMMAND	703
12	AEROPLANE GROUPING FOR PPC PURPOSES	703
13	FLIGHT CREW MEMBER QUALIFICATIONS	703
14	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - HELICOPTERS	703
15	Required Navigation Performance Capability (RNPC)	703
16	CATEGORY II - INSTRUMENT APPROACHES	703
19	APPROACH BAN OPERATIONS - AEROPLANES	703
20	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – HELICOPTERS	704
21	TAKE-OFF IN IMC - WEATHER BELOW LANDING MINIMA	704
22	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	704
23	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	704
24	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	704
24	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - HELICOPTERS	704
25	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	704
26	CATEGORY II - INSTRUMENT APPROACHES	704
27	MINIMUM ALTITUDES AND DISTANCES - HELICOPTERS	704
31	NET TAKE-OFF FLIGHT PATH - GREATER BANK ANGLE	704
32	AEROPLANE GROUPING FOR PPC PURPOSES	704
33	FLIGHT CREW MEMBER QUALIFICATIONS	704
35	CATEGORY I - ILS APPROACHES TO A DH 100' - HELICOPTERS	704
36	CATEGORY III - INSTRUMENT APPROACHES	704
37	Canadian Minimum Navigation Performance Specifications (CMNPS)	704
37	North Atlantic – High Level Airspace Operations (NAT HLA)	704
37	Required Navigation Performance Capability (RNPC)	704
40	CARRIAGE OF PERSONS	702



41	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – AEROPLANES	702
42	DAY VFR FLIGHT MINIMUM FLIGHT VISIBILITY - UNCONTROLLED AIRSPACE – HELICOPTERS	702
43	AIRCRAFT NIGHT OPERATIONS WITH PERSONS OTHER THAN FLIGHT CREW ON BOARD	702
44	ENTERING OR LEAVING A HELICOPTER IN FLIGHT	702
45	AIRCRAFT OPERATING OVER WATER – HELICOPTERS	702
46	HELICOPTER CLASS D EXTERNAL LOAD – MULTI-ENGINE (OEI CAPABLE)	702
47	HELICOPTER CLASS D EXTERNAL LOAD (LIMITED) – SINGLE OR MULTI-ENGINE (NOT OEI CAPABLE)	702
48	TAKE-OFF APPROACH OR LANDING WITHIN A BUILT-UP AREA	702
49	OPERATION OF AN AIRCRAFT OVER A BUILT-UP AREA	702
50	HELICOPTER CLASS B, C OR D EXTERNAL LOAD - BUILT-UP AREA OR AERIAL WORK ZONE	702
51	HELICOPTER CLASS B, C OR D EXTERNAL LOAD - NIGHT, VFR OTT OR IFR	702
52	Required Navigation Performance Capability (RNPC)	702
55	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITH CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	702
56	CUSMA - SPECIALTY AIR SERVICES OPERATIONS	702
57	AEROPLANE GROUPING FOR PPC PURPOSES	702
58	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' (WITHOUT CERTIFIED ENGINE-OUT TAKE-OFF PERFORMANCE)	702
59	CATEGORY I - II - III APPROACH OPERATIONS USING A HEAD UP DISPLAY (HUD) - AEROPLANES	705
60	FUEL REQUIREMENTS - EN ROUTE FUEL RESERVE REDUCTION	705
61	Extended Range Twin-Engined Operations (ETOPS)	705
62	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' - (1/4 MILE)	705
63	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	705
64	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	705
65	CATEGORY II - INSTRUMENT APPROACHES	705
66	FLIGHT ATTENDANT SEAT	705
67	EXCEPTIONS TO OPERATING LIMITATIONS – CONTAMINATED RUNWAYS	705
68	NET TAKE-OFF FLIGHT PATH - GREATER BANK ANGLE	705
71	FLIGHT CREW MEMBER QUALIFICATIONS	705
72	ADVANCED QUALIFICATION PROGRAM	705
73	EXCEPTIONS TO OPERATING LIMITATIONS – CONTAMINATED RUNWAYS	705
74	EXCEPTIONS TO OPERATING LIMITATIONS – TAKE-OFF WEIGHT – ACCELERATE-STOP DISTANCE	705
75	NET TAKE-OFF FLIGHT PATH - VISUAL OBSTACLE AVOIDANCE	705
76	CATEGORY III - INSTRUMENT APPROACHES	705
77	Canadian Minimum Navigation Performance Specifications (CMNPS)	705
77	North Atlantic – High Level Airspace Operations (NAT HLA)	705
77	Required Navigation Performance Capability (RNPC)	705
78	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	705
79	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	705
80	Extended Range Twin-Engined Operations (ETOPS)	701
81	Canadian Minimum Navigation Performance Specifications (CMNPS)	701
81	North Atlantic – High Level Airspace Operations (NAT HLA)	701
83	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	701



84	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' - (1/4 MILE)	701
85	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	701
86	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	701
87	CATEGORY II - INSTRUMENT APPROACHES	701
88	CATEGORY III - INSTRUMENT APPROACHES	701
89	MINIMUM CREW WITHOUT A SECOND-IN-COMMAND	701
90	EXTENDED CHARTER	700
91	MANAGEMENT AGREEMENT	700
92	INCREASE IN FLIGHT TIME	700
93	INCREASE IN FLIGHT DUTY PERIOD	700
94	TIME FREE FROM DUTY	700
95	PROGRAM OF CONTROLLED REST ON THE FLIGHT DECK	700
99	INSTRUMENT PROCEDURES - RCAP - STANDARD RESTRICTED INSTRUMENT PROCEDURES	700
100	Required Navigation Performance Approach (RNP APCH)	700
202	MINIMUM CREW WITHOUT A SECOND-IN-COMMAND	701
205	CUSMA - SPECIALTY AIR SERVICES OPERATIONS	701
206	CUSMA - SPECIALTY AIR SERVICES OPERATIONS	701
303	APPROACH BAN OPERATIONS - AEROPLANES	704
402	NO ALTERNATE AERODROME - IFR FLIGHT - AEROPLANES	604
403	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 600' - AEROPLANES	604
404	TAKE-OFF MINIMA - REPORTED VISIBILITY RVR 1200' - (1/4 MILE)	604
405	CATEGORY II - INSTRUMENT APPROACHES	604
406	INCREASE IN FLIGHT DUTY PERIOD	604
407	Canadian Minimum Navigation Performance Specifications (CMNPS)	604
407	North Atlantic – High Level Airspace Operations (NAT HLA)	604
408	CATEGORY III - INSTRUMENT APPROACHES	604
410	INSTRUMENT PROCEDURES - RCAP - STANDARD RESTRICTED INSTRUMENT PROCEDURES	604
503	APPROACH BAN OPERATIONS - AEROPLANES	705
600	Air Ambulance Operations (AIR AMBULANCE)	700
602	SIMULTANEOUS OPERATIONS IFR APPROACHES - GLS/ILS/LDA/RNAV PRM AND SOIA	700
603	Night Vision Imaging Systems Operations (NVIS)	700
605	INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - RNP AR PROCEDURES	700
606	INSTRUMENT PROCEDURES - RCAP - SPECIALIZED RESTRICTED INSTRUMENT PROCEDURES - HELICOPTERS	700
609	Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	702
609	Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	703
609	Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	704
609	Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	705
610	Automatic Dependent Surveillance-Broadcast Operations (ADS-B)	701
611	Required Navigation Performance 10 Airspace (RNP 10)	701
611	Required Navigation Performance 10 Airspace (RNP 10)	705
612	Area Navigation 1 and 2 (RNAV 1 AND 2)	705
613	Area Navigation 5 (RNAV 5)	705
614	Required Navigation Performance 4 Airspace (RNP 4)	705
617	Land and Hold Short Operations (LAHSO)	705



618	Required Navigation Performance 1 (RNP 1)	705
620	Required Navigation Performance Approach (RNP APCH)	705
621	Required Navigation Performance Authorization Required Approach (RNP AR APCH)	705
623	Required Navigation Performance Radius To Fix Path Terminator (RNP – RADIUS TO FIX (RF) PATH TERMINATOR)	705