

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.534

National Policy

Effective Date:
12/19/19

Cancellation Date:
12/19/20

SUBJ: OpSpec/MSpec H105, Alternate Airport IFR Weather Minimums

- 1. Purpose of This Notice.** This notice announces a mandatory revision to operations specification (OpSpec)/management specification (MSpec) H105 and implementation of guidance for rotorcraft operations conducted under Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (part 91K) and 135.
- 2. Audience.** The primary audience for this notice is the Flight Standards Safety Assurance offices' aviation safety inspectors (ASI). The secondary audience includes the Safety Standards and Foundational Business offices.
- 3. Where You Can Find This Notice.** You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators can find this notice on the Federal Aviation Administration's (FAA) website at <http://fsims.faa.gov>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.
- 4. Revision.** OpSpec/MSpec H105 authorizes certificate holders and program managers to derive alternate airport instrument flight rules (IFR) weather minimums in those cases that require an alternate airport. This revision to H105:
 - a.** Revises the "Ceiling" column of Table 1, Alternate Airport IFR Weather Minimums, replacing the abbreviations "HAA" and "HAT" with "DA(H)" and "MDA(H)." Both decision altitude (height) (DA(H)) and minimum descent altitude (height) (MDA(H)) are defined in OpSpec/MSpec A002, Definitions and Abbreviations. These definitions are consistent with both current U.S. operator usage and International Civil Aviation Organization (ICAO) international agreements and provide a clear explanation of "(H)" or "height" value, relating (H) to height above touchdown (HAT) and height above airport (HAA).
 - b.** Adds subparagraph b, Special Limitations and Provisions.
 - c.** Adds Table 2, GPS-Based IAP Authorizations, in subparagraph b(5) and conditions and limitations in subparagraphs b(5)(e)(i)–(iv) to authorize Global Positioning System (GPS)-based instrument approach procedure (IAP) minimums at the alternate airport.

5. Guidance.

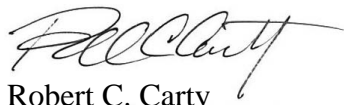
a. OpSpec/MSpec H105. This notice contains the following:

- The sample OpSpec H105 template in Appendix A applies to part 135.
- The sample OpSpec H105 template in Appendix B applies to part 121/135.
- The sample MSpec H105 template in Appendix C applies to part 91K.

b. FAA Order 8900.1. Volume 3, Chapter 18, Section 7, Part H Helicopter Terminal Instrument Procedures and Airport Authorizations and Limitations, is updated to provide guidance on the applicability and issuance of H105. Alternate airport planning policy for an operator is based on equipage. This revised guidance includes a chart in Figure 3-228, GPS-Based Instrument Approach Procedures, for additional clarity on equipage and selection of applicable subparagraphs in the “Conditions and Limitations” column of Table 2 of H105.

6. Action. Principal Operations Inspectors (POI) will review this notice and the revised Order 8900.1 guidance for issuance of H105. POIs should provide this notice to the operators for whom they have oversight responsibility. This is a mandatory revision with a compliance date of 180 days from the effective date of this notice.

7. Disposition. We will incorporate the information in this notice into Order 8900.1, Volume 3, Chapter 18, Section 7 before this notice expires. Direct questions concerning the information in this notice to the Flight Technologies and Procedures Division, Flight Operations Group (AFS-410) at 202-267-8795.



Robert C. Carty
Deputy Executive Director, Flight Standards Service

Appendix A. Sample OpSpec H105, Alternate Airport IFR Weather Minimums: 14 CFR Part 135

- a. The certificate holder is authorized to derive alternate airport weather minimums from Table 1 below, according to the limitations and provisions of this operations specification. In no case shall the certificate holder use an alternate airport weather minimum lower than any applicable minimum derived from this table.

Table 1 – Alternate Airport IFR Weather Minimums

Approach Facility Configuration	Ceiling	Visibility
For airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a CAT I precision approach procedure, or, when applicable, a circling maneuver from an IAP.	A ceiling derived by adding 200 ft to MDA(H) or DA(H), as applicable.	1 statute mile (sm) or 1600 m but never less than the minimum visibility for the approach to be flown.

b. Special Limitations and Provisions.

(1) The certificate holder must not use an alternate airport weather minimum other than any applicable minimum derived from Table 1. The certificate holder must not use any Global Positioning System (GPS)-based instrument approach procedure (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(5).

(2) In determining alternate airport weather minimums, the certificate holder must not use any published IAP that specifies that alternate airport weather minimums are not authorized.

(3) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) and rounded to the next 100-ft value (if not a multiple of 100) to determine the required ceiling.

(4) When dispatching a flight under the provisions of the minimum equipment list (MEL), those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(5) Use of GPS-Based IAP Minimums at an Alternate Airport. The certificate holder may use GPS-based IAP minimums at an alternate airport with the rotorcraft make, model, and series (M/M/S) listed in Table 2 below. If no authorizations appear in Table 2, GPS-based IAP minimums are not authorized at an alternate airport. Examples of GPS-based IAP include GPS, Area Navigation (RNAV) (GPS), and RNAV (Required Navigation Performance (RNP)). Use of GPS-based IAP minimums at the departure, en route, or destination alternate airport is authorized in the U.S. National Airspace System (NAS) and in any foreign State where GPS-based (or other Global Navigation Satellite System (GNSS)-based, including Satellite-based Augmentation System (SBAS)-based) approaches are authorized for alternate planning as determined by the applicable Aeronautical Information Publication (AIP).

[Select the applicable subparagraph reference from the dropdown list in the “Conditions and Limitations” column of Table 2 below. If the operator does not have rotorcraft equipped with FDE or WAAS, select “N/A” in “Conditions and Limitations” and enter “N/A” in the “Remarks” column. Leave the “Rotorcraft M/M/S” column empty.]

Table 2 – GPS-Based IAP Authorizations

Rotorcraft M/M/S	Conditions and Limitations	Remarks
[Dropdown List]	[Dropdown List: Subparagraph b(5)(e)(i) Subparagraph b(5)(e)(ii) Subparagraph b(5)(e)(iii) Subparagraph b(5)(e)(iv) N/A]	[Text Box]

(a) Before the certificate holder is authorized to plan for the lines of minimums specified below, the certificate holder must be approved to conduct GPS-based IAP under Operations Specification H102, Basic Instrument Approach Procedure Authorizations - All Airports, if applicable; Operations Specification H122, Special Instrument Procedures for Rotorcraft Operations; and Operations Specification H123, Class I Navigation Using Area or Long-Range Navigation Systems with WAAS for Rotorcraft RNP 0.3 En Route and Terminal Operations, if applicable.

(b) The certificate holder with either a Technical Standard Order (TSO)-C129() or a TSO-C196() navigation system must perform a preflight receiver autonomous integrity monitoring (RAIM) prediction for the airport where the GPS-based IAP will be flown. The certificate holder must also ensure that the conventional approach (at destination) can be flown without reliance on GPS. The certificate holder must check Notices to Airmen (NOTAM) as part of the preflight planning activities.

(c) The certificate holder with either a TSO-C145() or a TSO-C146() navigation system must review appropriate Aeronautical Information Services (AIS) and NOTAMs for wide area augmentation system (WAAS) service outages.

(d) The certificate holder may use suitable RNAV systems for flight planning at an alternate airport, provided planned availability of the substitute means of navigation is confirmed (e.g., NOTAMs and RAIM prediction for use of GPS and NOTAM/AIS checks for use of WAAS). The certificate holder may plan for a conventional approach at the destination and may plan to use a substitute means of navigation based on GPS at the alternate airport, not including substitution for the navigation aid providing lateral guidance on the Final Approach Segment (FAS), unless otherwise authorized. For example, the certificate holder may use GPS to substitute for an out-of-service very high frequency omni-directional range (VOR) that supports an instrument landing system (ILS) Missed Approach Procedure (MAP) at an alternate airport (unless the procedure is NOTAM'd “not authorized”).

(e) The certificate holder may use GPS-based IAP with the rotorcraft M/M/S listed in Table 2 according to the conditions and limitations in subparagraphs b(5)(e)(i) through (iv), as indicated in the “Conditions and Limitations” column for each rotorcraft M/M/S.

(i) The certificate holder must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes fault detection and exclusion (FDE) capability to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV), the certificate holder must only plan to use lateral navigation (LNAV) (or circling) minimum descent altitude (height) (MDA(H)).

(ii) The certificate holder must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes FDE capability and is equipped with baro-VNAV to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, the certificate holder may plan to use LNAV (or circling) MDA(H) or LNAV/vertical navigation (VNAV) decision altitude (height) (DA(H)) if using baro-VNAV.

(iii) The certificate holder must have a navigation system, either a TSO-C145() or a TSO-C146(), and may utilize GPS-based IAP at both the destination and an alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder must only plan to use LNAV (or circling) MDA(H).

(iv) The certificate holder must have a navigation system, either a TSO-C145() or a TSO-C146(), equipped with baro-VNAV, to utilize GPS-based IAP at both the destination and an alternate. At the alternate, the certificate holder may plan to use LNAV (or circling) MDA(H) or LNAV/VNAV DA(H) if using baro-VNAV.

**Appendix B. Sample OpSpec H105, Alternate Airport IFR Weather Minimums:
14 CFR Part 121/135**

a. The certificate holder is authorized to derive alternate airport weather minimums from Table 1 below, according to the limitations and provisions of this operations specification. In no case shall the certificate holder use an alternate airport weather minimum lower than any applicable minimum derived from this table.

Table 1 – Alternate Airport IFR Weather Minimums

Approach Facility Configuration	Ceiling	Visibility
For airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a CAT I precision approach procedure, or, when applicable, a circling maneuver from an IAP.	A ceiling derived by adding 200 ft to MDA(H) or DA(H), as applicable.	1 statute mile (sm) or 1600 m but never less than the minimum visibility for the approach to be flown.

b. Special Limitations and Provisions.

(1) The certificate holder must not use an alternate airport weather minimum other than any applicable minimum derived from Table 1. The certificate holder must not use any Global Positioning System (GPS)-based instrument approach procedure (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(5).

(2) In determining alternate airport weather minimums, the certificate holder must not use any published IAP that specifies that alternate airport weather minimums are not authorized.

(3) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) and rounded to the next 100-ft value (if not a multiple of 100) to determine the required ceiling.

(4) When dispatching a flight under the provisions of the minimum equipment list (MEL), those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(5) Use of GPS-Based IAP Minimums at an Alternate Airport. The certificate holder may use GPS-based IAP minimums at an alternate airport with the rotorcraft make, model, and series (M/M/S) listed in Table 2 below. If no authorizations appear in Table 2, GPS-based IAP minimums are not authorized at an alternate airport. Examples of GPS-based IAP include GPS, Area Navigation (RNAV) (GPS), and RNAV (Required Navigation Performance (RNP)). Use of GPS-based IAP minimums at the departure, en route, or destination alternate airport is authorized in the U.S. National Airspace System (NAS) and in any foreign State where GPS-based (or other Global Navigation Satellite System (GNSS)-based, including Satellite-based Augmentation System (SBAS)-based) approaches are authorized for alternate planning as determined by the applicable Aeronautical Information Publication (AIP).

[Select the applicable subparagraph reference from the dropdown list in the “Conditions and Limitations” column of Table 2 below. If the operator does not have rotorcraft equipped with FDE or WAAS, select “N/A” in “Conditions and Limitations” and enter “N/A” in the “Remarks” column. Leave the “Rotorcraft M/M/S” column empty.]

Table 2 – GPS-Based IAP Authorizations

Rotorcraft M/M/S	Conditions and Limitations	Remarks
[Dropdown List]	[Dropdown List: Subparagraph b(5)(e)(i) Subparagraph b(5)(e)(ii) Subparagraph b(5)(e)(iii) Subparagraph b(5)(e)(iv) N/A]	[Text Box]

(a) Before the certificate holder is authorized to plan for the lines of minimums specified below, the certificate holder must be approved to conduct GPS-based IAP under Operations Specification H102, Basic Instrument Approach Procedure Authorizations - All Airports, if applicable; Operations Specification H122, Special Instrument Procedures for Rotorcraft Operations; and Operations Specification H123, Class I Navigation Using Area or Long-Range Navigation Systems with WAAS for Rotorcraft RNP 0.3 En Route and Terminal Operations, if applicable.

(b) The certificate holder with either a Technical Standard Order (TSO)-C129() or a TSO-C196() navigation system must perform a preflight receiver autonomous integrity monitoring (RAIM) prediction for the airport where the GPS-based IAP will be flown. The certificate holder must also ensure that the conventional approach (at destination) can be flown without reliance on GPS. The certificate holder must check Notices to Airmen (NOTAM) as part of the preflight planning activities.

(c) The certificate holder with either a TSO-C145() or a TSO-C146() navigation system must review appropriate Aeronautical Information Services (AIS) and NOTAMs for wide area augmentation system (WAAS) service outages.

(d) The certificate holder may use suitable RNAV systems for flight planning at an alternate airport, provided planned availability of the substitute means of navigation is confirmed (e.g., NOTAMs and RAIM prediction for use of GPS and NOTAM/AIS checks for use of WAAS). The certificate holder may plan for a conventional approach at the destination and may plan to use a substitute means of navigation based on GPS at the alternate airport, not including substitution for the navigation aid providing lateral guidance on the Final Approach Segment (FAS), unless otherwise authorized. For example, the certificate holder may use GPS to substitute for an out-of-service very high frequency omni-directional range (VOR) that supports an instrument landing system (ILS) Missed Approach Procedure (MAP) at an alternate airport (unless the procedure is NOTAM'd “not authorized”).

(e) The certificate holder may use GPS-based IAP with the rotorcraft M/M/S listed in Table 2 according to the conditions and limitations in subparagraphs b(5)(e)(i) through (iv), as indicated in the “Conditions and Limitations” column for each rotorcraft M/M/S.

(i) The certificate holder must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes fault detection and exclusion (FDE) capability to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV), the certificate holder must only plan to use lateral navigation (LNAV) (or circling) minimum descent altitude (height) (MDA(H)).

(ii) The certificate holder must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes FDE capability and is equipped with baro-VNAV to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, the certificate holder may plan to use LNAV (or circling) MDA(H) or LNAV/vertical navigation (VNAV) decision altitude (height) (DA(H)) if using baro-VNAV.

(iii) The certificate holder must have a navigation system, either a TSO-C145() or a TSO-C146(), and may utilize GPS-based IAP at both the destination and an alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder must only plan to use LNAV (or circling) MDA(H).

(iv) The certificate holder must have a navigation system, either a TSO-C145() or a TSO-C146(), equipped with baro-VNAV, to utilize GPS-based IAP at both the destination and an alternate. At the alternate, the certificate holder may plan to use LNAV (or circling) MDA(H) or LNAV/VNAV DA(H) if using baro-VNAV.

Appendix C. Sample MSpec H105, Alternate Airport IFR Weather Minimums: 14 CFR Part 91K

a. The program manager is authorized to derive alternate airport weather minimums from Table 1 below, according to the limitations and provisions of this management specification. In no case shall the program manager use an alternate airport weather minimum lower than any applicable minimum derived from this table.

Table 1 – Alternate Airport IFR Weather Minimums

Approach Facility Configuration	Ceiling	Visibility
For airports with at least one operational navigational facility providing a straight-in nonprecision approach procedure, or a CAT I precision approach procedure, or, when applicable, a circling maneuver from an IAP.	A ceiling derived by adding 200 ft to MDA(H) or DA(H), as applicable.	1 statute mile (sm) or 1600 m but never less than the minimum visibility for the approach to be flown.

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(2) In determining alternate airport weather minimums, the program manager must not use any published IAP that specifies that alternate airport weather minimums are not authorized.

(3) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) and rounded to the next 100-ft value (if not a multiple of 100) to determine the required ceiling.

(4) When releasing a flight under the provisions of the minimum equipment list (MEL), those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(5) Use of GPS-Based IAP Minimums at an Alternate Airport. The program manager may use GPS-based IAP minimums at an alternate airport with the rotorcraft make, model, and series (M/M/S) listed in Table 2 below. If no authorizations appear in Table 2, GPS-based IAP minimums are not authorized at an alternate airport. Examples of GPS-based IAP include GPS, Area Navigation (RNAV) (GPS), and RNAV (Required Navigation Performance (RNP)). Use of GPS-based IAP minimums at the departure, en route, or destination alternate airport is authorized in the U.S. National Airspace System (NAS) and in any foreign State where GPS-based (or other Global Navigation Satellite System (GNSS)-based, including Satellite-based Augmentation System (SBAS)-based) approaches are authorized for alternate planning as determined by the applicable Aeronautical Information Publication (AIP).

[Select the applicable subparagraph reference from the dropdown list in the “Conditions and Limitations” column of Table 2 below. If the operator does not have rotorcraft equipped with FDE or WAAS, select “N/A” in “Conditions and Limitations” and enter “N/A” in the “Remarks” column. Leave the “Rotorcraft M/M/S” column empty.]

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(a) Before the program manager is authorized to plan for the lines of minimums specified below, the program manager must be approved to conduct GPS-based IAP under Management Specification H102, Basic Instrument Approach Procedure Authorizations - All Airports, if applicable; Management Specification H122, Special Instrument Procedures for Rotorcraft Operations; and Management Specification H123, Class I Navigation Using Area or Long-Range Navigation Systems with WAAS for Rotorcraft RNP 0.3 En Route and Terminal Operations, if applicable.

(b) The program manager with either a Technical Standard Order (TSO)-C129() or a TSO-C196() navigation system must perform a preflight receiver autonomous integrity monitoring (RAIM) prediction for the airport where the GPS-based IAP will be flown. The program manager must also ensure that the conventional approach (at destination) can be flown without reliance on GPS. The program manager must check Notices to Airmen (NOTAM) as part of the preflight planning activities.

(c) The program manager with either a TSO-C145() or a TSO-C146() navigation system must review appropriate Aeronautical Information Services (AIS) and NOTAMs for wide area augmentation system (WAAS) service outages.

(d) The program manager may use suitable RNAV systems for flight planning at an alternate airport, provided planned availability of the substitute means of navigation is confirmed (e.g., NOTAMs and RAIM prediction for use of GPS and NOTAM/AIS checks for use of WAAS). The program manager may plan for a conventional approach at the destination and may plan to use a substitute means of navigation based on GPS at the alternate airport, not including substitution for the navigation aid providing lateral guidance on the Final Approach Segment (FAS), unless otherwise authorized. For example, the program manager may use GPS to substitute for an out-of-service very high frequency omni-directional range (VOR) that supports an instrument landing system (ILS) Missed Approach Procedure (MAP) at an alternate airport (unless the procedure is NOTAM'd “not authorized”).

(e) The program manager may use GPS-based IAP with the rotorcraft M/M/S listed in Table 2 according to the conditions and limitations in subparagraphs b(5)(e)(i) through (iv), as indicated in the “Conditions and Limitations” column for each rotorcraft M/M/S.

(i) The program manager must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes fault detection and exclusion (FDE) capability to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV), the program manager must only plan to use lateral navigation (LNAV) (or circling) minimum descent altitude (height) (MDA(H)).

(ii) The program manager must have a navigation system, either a TSO-C129() or a TSO-C196(), that includes FDE capability and is equipped with baro-VNAV to utilize GPS-based IAP at either the destination or an alternate (not both). At the alternate, the program manager may plan to use LNAV (or circling) MDA(H) or LNAV/vertical navigation (VNAV) decision altitude (height) (DA(H)) if using baro-VNAV.

(iii) The program manager must have a navigation system, either a TSO-C145() or a TSO-C146(), and may utilize GPS-based IAP at both the destination and an alternate. At the alternate, if not equipped with and using baro-VNAV, the program manager must only plan to use LNAV (or circling) MDA(H).

(iv) The program manager must have a navigation system, either a TSO-C145() or a TSO-C146(), equipped with baro-VNAV, to utilize GPS-based IAP at both the destination and an alternate. At the alternate, the program manager may plan to use LNAV (or circling) MDA(H) or LNAV/VNAV DA(H) if using baro-VNAV.