NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.218

National Policy

Effective Date:
5/30/13

Cancellation Date:
5/30/14

SUBJ: Alternate Airport IFR Weather Minimums

1. Purpose of This Notice. This document provides notice of change to operations specification (OpSpec), management specification (MSpec), and letter of authorization (LOA) C055 and implementation of guidance for operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (part 91K), 121, 125 (including the Letter of Deviation Authority (LODA) 125 operators), and 135.

2. Audience. The primary audience for this notice is certificate-holding district offices (CHDO), Flight Standards District Offices (FSDO), certificate management offices (CMO), principal inspectors (PI), and aviation safety inspectors (ASI). The secondary audience includes Flight Standards Service (AFS) divisions and branches in the regions and in headquarters (HQ).

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site 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) Web site at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. OpSpec/MSpec/LOA C055, Alternate Airport IFR Weather Minimums was published to authorize certificate holders/program managers/operators to derive alternate airport instrument flight rules (IFR) weather minimums in those cases that require an alternate airport. C055 is being revised in the following ways:

- Provides clarification on credit for alternate minima based on Category II or Category III capability.
- Describes changes that allow operators with unaugmented Global Positioning System (GPS) navigation systems to plan for use of GPS-based instrument approach procedures (IAP) at destination or alternate airports (but not both locations) in the U.S. National Airspace System (NAS).
- Broadens allowances for wide area augmentation system (WAAS) navigation system equipped operators to address those navigation systems that incorporate a barometric vertical navigation input.

Note: This OpSpec/MSpec/LOA is being updated to reflect the new alternate airport planning policy.

5. Inspector Guidance. The following text will replace current Order 8900.1, Flight Standards Information Management Systems (FSIMS), Volume 3, Chapter 18, Section 5, OpSpec/MSpec/LOA C055, Alternate Airport IFR Weather Minimums, subparagraphs G and I:

G. Use of Global Positioning System (GPS)-Based Instrument Approach Procedure (IAP) Minima at an Alternate Airport. Alternate airport planning policy for operators is based on their equipage. Use of GPS-based IAP minima at the alternate airport is authorized in the U.S. National Airspace System (NAS) and in any State where allowed/authorized. Please consult the applicable Aeronautical Information Publication (AIP). Wide area augmentation system (WAAS) navigation-equipped operators may still plan for GPS-based IAP (e.g., GPS, Area Navigation (RNAV) (GPS), RNAV Required Navigation Performance (RNP)) at both the destination and/or the alternate airport. GPS navigation-equipped operators with fault detection and exclusion (FDE) capability but without WAAS navigation equipment may now plan for GPS-based IAP at either the destination or the alternate airport. Finally, GPS- or WAAS-equipped operators with barometric vertical navigation (baro-VNAV) equipment may plan to use this capability at either destination or alternate airports. Use Table 2, GPS-Based Instrument Approach Procedure (IAP) Authorizations, of the template to authorize GPS-based IAP minima at the alternate airport. Input airplane information in the "Make/Model/Series" column and the applicable optional paragraph (i-iv) in the "Conditions and Limitations" column. If there are mixed fleets (e.g., retrofits or other changes), develop a local tracking mechanism (e.g., a spreadsheet detailing various equipage levels of the fleet). (Subparagraphs G1) through G4) below correspond to OpSpec/MSpec template 8.e.i.–8.e.iv and LOA template 2h(5)(A)-(D).) For additional clarity regarding optional subparagraphs 1)-4) below, reference Chart 1 below.

1) Operators of aircraft with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems that include FDE capability may utilize GPS-based IAP at either the destination or alternate (not both):

a) That are approved to conduct GPS-based IAP under OpSpec/MSpec/LOA C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports.

b) Operators must check Notices to Airmen (NOTAM) as part of the preflight planning activities.

c) Perform a preflight receiver autonomous integrity monitoring (RAIM) prediction for the airport where the GPS-based IAP will be flown.

d) Ensure that the conventional approach (at destination) can be flown without reliance on GPS.

e) At the alternate, if not equipped with baro-VNAV, may only plan to lateral navigation (LNAV) (or circling) minimum descent altitude (MDA)(h).

2) Operators of aircraft with TSO-C129() and TSO-C196() navigation systems that include FDE capability and baro-VNAV may utilize GPS-based IAP at either the destination or alternate (not both):

a) That are approved to conduct GPS-based IAP under OpSpec/MSpec/LOA C052 and RNAV (RNP) IAP if they have OpSpec/MSpec/LOA C384, Required Navigation Performance Procedures with Authorization Required.

b) Operators must check NOTAMs as part of the preflight planning activities.

c) Perform a preflight RAIM prediction for the airport where the GPS-based IAP will be flown.

d) Ensure that the conventional approach (at destination) can be flown without reliance on GPS.

e) At the alternate, on GPS-based IAP may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h) if equipped with baro-VNAV.

f) At the alternate, on an RNAV (RNP) IAP must plan for no lower than a RNP 0.30 DA(h).

3) Operators of aircraft with TSO-C145() and TSO-C146() navigation systems may utilize GPS-based IAP at both the destination and alternate:

a) That are approved to conduct GPS-based IAP under OpSpec/MSpec/LOA C052.

b) Must review appropriate Aeronautical Information Services (AIS) and NOTAMs for WAAS service outages. (Reference Advisory Circular (AC) 90-107, Guidance for Localizer Performance with Vertical Guidance and Localizer Performance without Vertical Guidance Approach Operations in the U.S. National Airspace System for more details). In the event of a WAAS failure, WAAS avionics revert to unaugmented GPS functions and operators without baro-VNAV should follow guidance in subparagraph G1) above.

c) At the alternate, if not equipped with baro-VNAV may only plan to LNAV (or circling) MDA(h).

4) Operators of aircraft with TSO-C145() and TSO-C146() navigation systems that are specifically equipped with and using baro-VNAV (instead of WAAS derived vertical flight path information) may utilize GPS-based IAP at both the destination and alternate:

a) That are approved to conduct GPS-based IAP under OpSpec/MSpec/LOA C052, and RNAV (RNP) IAP under OpSpec/MSpec/LOA C384.

b) Must review appropriate AIS and NOTAMs for WAAS service outages. (Reference AC 90-107 for more details). In the event of a WAAS failure, WAAS avionics revert

to unaugmented GPS functions and operators with baro-VNAV should follow guidance in subparagraph G2) above.

c) At the alternate, on GPS-based IAP may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h).

d) At the alternate, on an RNAV (RNP) IAP must plan for no lower than a RNP 0.3 DA (h).

5) Planning for use of GPS-based IAP must be based on a single navigational facility when determining the approach facility configuration in Table 1, even if there are two or more RNAV (GPS) approaches to different suitable runways.

6) The FAA is removing the "NA" (alternate minimums not authorized) symbol from select RNAV (GPS) and GPS approach procedures so that operators with approach-approved receivers may use them at alternate airports. Some approach procedures will still require the "NA" symbol for other reasons (e.g., unmonitored facility or no weather reporting); therefore, the FAA cannot remove it from all procedures. Because every procedure must receive individual evaluations, removal of "NA" from RNAV (GPS) and GPS procedures will take some time.

7) Operators 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). Operators 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, unless otherwise authorized. For example, they may use an out-of-service VHF omni-directional radio range (VOR) that supports an instrument landing system (ILS) missed approach procedure at an alternate airport. For more examples, reference AC 90-108, Use of Suitable Area Navigation (RNAV) Systems on Conventional Routes and Procedures.

Chart 1

GPS-based IAP at Either Destination or Alternate (not both)					
Paragraph Reference	TSO	FDE	BaroVNAV	Opsec/MSpec /LOA	Alternate Restrictions
i	TSO-C129( ) or TSO-C196( )	yes	no	C052	LNAV MDA(h)
ii	TSO-C129( ) or TSO-C196( )	yes	yes	C052	LNAV MDA(h) or LNAV/VNAV DA(h)
ii	TSO-C129( ) or TSO-C196( )	yes	yes	C052 & C384	RNAV (RNP) no lower than RNP 0.30 DA(h)
GPS-based IAP at Destination and Alternate (may be either or both)					
iii	TSO-C145( ) or TSO-C146 ( )	yes	no	C052	LNAV MDA(h)
iv	TSO-C145( ) or TSO-C146 ( )	yes	yes	C052	LNAV MDA(h) or LNAV/VNAV DA(h)
iv	TSO-C145( ) or TSO-C146 ( )	yes	yes	C052 & C384	RNAV (RNP) no lower than RNP 0.30 DA(h)

I. Tables. There are two tables in the OpSpec/MSpec/LOA templates.

1) In Table 1, there are two selectable rows to authorize lower alternate airport IFR weather minimums if CAT II or CAT III credit is authorized. See paragraph F above.

2) In Table 2, to authorize properly equipped operators to plan for GPS-based IAP, input airplane information in the "Make/Model/Series" column and the applicable optional paragraph (i-iv) in the "Conditions and Limitations" column. See paragraph G above.

6. Guidance. The Flight Technologies and Procedures Division (AFS-400) developed this notice. This notice contains the following:

- Sample OpSpec C055 template in Appendix A, which applies to part 121.
- Sample OpSpec C055 template in Appendix B, which applies to part 125.
- Sample OpSpec C055 template in Appendix C, which applies to part 135.
- Sample OpSpec C055 template in Appendix D, which applies to part 121/135.
- Sample LOA C055 template in Appendix E, which applies to part 125 LODA holders.
- Sample MSpec C055 template in Appendix F, which applies to part 91K.

7. Action. PIs should review their certificate holder's, program manager's, or operator's OpSpecs, MSpecs, and LOAs and reissue OpSpec, MSpec, and LOA C055. This authorization is mandatory for certificate holders/program managers/operators currently issued C055. The compliance date will be 180 days from the date of this notice. Those operators with non-standard language in their current C055 must submit the text through the regional FSDO to the Air Transportation Division (AFS-200) for review and approval.

8. Disposition. We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct your questions or comments concerning this notice to the Performance Based Flight Systems Branch (AFS-470) at 202-385-4623 or your regional Next Generation (NextGen) Branch listed below.

- AAL-220 at 907-271-3579.
- ACE-220 at 816-329-3280.
- AEA-220 at 781-238-7207.
- AGL-220 at 847-294-7549.
- ANM-220 at 425-917-6728.
- ASO-220 at 404-305-6078.
- ASW-220 at 817-222-5244.
- AWP-220 at 310-725-7215.

John M. Allen
Director, Flight Standards Service

Appendix A. Sample OpSpec Paragraph C055, Alternate Airport IFR Weather Minimums: 14 CFR Part 121

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.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

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. holder must not use any GPS-based Instrument Approach Procedures (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(8).

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

(3) When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer's maximum demonstrated crosswind.

(4) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

(5) When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(6) For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

(7) Credit for alternate minimums based on Category II or Category III capability is authorized if the certificate holder is approved for engine inoperative CAT III operations under OpSpec C060.

(8) Use of Global Positioning System (GPS)-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(a) Before the certificate holder is authorized to plan for the line of minima specified below, the certificate holder shall be approved to conduct GPS-based IAP under OpSpec C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have OpSpecC384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(b) The certificate holder with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems 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 (NOTAMs) as part of the preflight planning activities.

(c) The certificate holder with TSO-C145() and TSO-C146() navigation systems 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, unless otherwise authorized. For example, the certificate holder may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(e) The certificate holder may use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs (8)(e)(i)-(iv), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph (8)(e)(i)	
	Subparagraph (8)(e)(ii)	
	Subparagraph (8)(e)(iii)	
	Subparagraph (8)(e)(iv)	

(i) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the certificate holder may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the certificate holder may only plan to LNAV (or circling) MDA(h).

(ii) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either

the destination or alternate (not both). At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(iii) The certificate holder has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder may only plan to LNAV (or circling) MDA(h).

(iv) The certificate holder has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

Appendix B. Sample OpSpec Paragraph C055, Alternate Airport IFR Weather Minimums: 14 CFR Part 125

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.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

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. holder must not use any GPS-based Instrument Approach Procedures (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(8).

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

(3) When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer's maximum demonstrated crosswind.

(4) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

(5) When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(6) For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

(7) Credit for alternate minimums based on Category II or Category III capability is authorized if the certificate holder is approved for engine inoperative CAT III operations under OpSpec C060.

(8) Use of Global Positioning System (GPS)-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(a) Before the certificate holder is authorized to plan for the line of minima specified below, the certificate holder shall be approved to conduct GPS-based IAP under OpSpec C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have OpSpec C384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(b) The certificate holder with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems 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 (NOTAMs) as part of the preflight planning activities.

(c) The certificate holder with TSO-C145() and TSO-C146() navigation systems 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, unless otherwise authorized. For example, the certificate holder may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(e) The certificate holder may use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs (8)(e)(i)-(iv), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph (8)(e)(i)	
	Subparagraph (8)(e)(ii)	
	Subparagraph (8)(e)(iii)	
	Subparagraph (8)(e)(iv)	

(i) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the certificate holder may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the certificate holder may only plan to LNAV (or circling) MDA(h).

(ii) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either

the destination or alternate (not both). At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(iii) The certificate holder has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder may only plan to LNAV (or circling) MDA(h).

(iv) The certificate holder has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

Appendix C. Sample OpSpec Paragraph C055, 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.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

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 GPS-based Instrument Approach Procedures (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(8).

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

(3) When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer's maximum demonstrated crosswind.

(4) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

(5) When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(6) For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

(7) Credit for alternate minimums based on Category II or Category III capability is authorized if the certificate holder is approved for engine inoperative CAT III operations under OpSpec C060.

(8) Use of Global Positioning System (GPS)-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(a) Before the certificate holder is authorized to plan for the line of minima specified below, the certificate holder shall be approved to conduct GPS-based IAP under OpSpec C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have OpSpec C384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(b) The certificate holder with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems 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 (NOTAMs) as part of the preflight planning activities.

(c) The certificate holder with TSO-C145() and TSO-C146() navigation systems 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, unless otherwise authorized. For example, the certificate holder may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(e) The certificate holder may use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs (8)(e)(i)-(iv), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph (8)(e)(i)	
	Subparagraph (8)(e)(ii)	
	Subparagraph (8)(e)(iii)	
	Subparagraph (8)(e)(iv)	

(i) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the certificate holder may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the certificate holder may only plan to LNAV (or circling) MDA(h).

(ii) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either

the destination or alternate (not both). At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(iii) The certificate holder has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder may only plan to LNAV (or circling) MDA(h).

(iv) The certificate holder has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

Appendix D. Sample OpSpec Paragraph C055, 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.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

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 procedures (IAP) unless the certificate holder is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(8).

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

(3) When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer's maximum demonstrated crosswind.

(4) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

(5) When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(6) For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

(7) Credit for alternate minimums based on Category II or Category III capability is authorized if the certificate holder is approved for engine inoperative CAT III operations under OpSpec C060.

(8) Use of Global Positioning System (GPS)-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(a) Before the certificate holder is authorized to plan for the line of minima specified below, the certificate holder shall be approved to conduct GPS-based IAP under OpSpec C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have OpSpec C384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(b) The certificate holder with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems 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 (NOTAMs) as part of the preflight planning activities.

(c) The certificate holder with TSO-C145() and TSO-C146() navigation systems 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, unless otherwise authorized. For example, the certificate holder may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(e) The certificate holder may use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs (8)(e)(i)-(iv), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph (8)(e)(i)	
	Subparagraph (8)(e)(ii)	
	Subparagraph (8)(e)(iii)	
	Subparagraph (8)(e)(iv)	

(i) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the certificate holder may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the certificate holder may only plan to LNAV (or circling) MDA(h).

(ii) The certificate holder has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either

the destination or alternate (not both). At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(iii) The certificate holder has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the certificate holder may only plan to LNAV (or circling) MDA(h).

(iv) The certificate holder has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the certificate holder may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The certificate holder authorized under OpSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

Appendix E. Sample LOA Paragraph C055, Alternate Airport IFR Weather Minimums: 14 CFR Part 125 (LODA)

Letter of Authorization
Alternate Airport IFR Weather Minimums

1. The Operator/Company, authorized to conduct operations in accordance with the Letter of Deviation Authority (LODA A125), is authorized to derive alternate airport weather minimums from Table 1 below.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

2. Special Limitations and Provisions.

a. The Operator/Company must not use an alternate airport weather minimum other than any applicable minimum derived from Table 1.The Operator/Company must not use any Global Positioning System (GPS)-based instrument approach procedures (IAP) unless the Operator/Company is authorized to conduct GPS-based IAP and meets the requirements in subparagraph 2(h).

b. In determining alternate airport weather minimums, the Operator/Company must not use any published IAP which specifies that alternate airport weather minimums are not authorized.

c. When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer’s maximum demonstrated crosswind.

d. All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

e. When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

f. For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

g. Credit for alternate minimums based on Category (CAT) II or CAT III capability is authorized if the Operator/Company is approved for engine inoperative CAT III operations under LOA C060.

h. Use of GPS-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(1) Before the Operator/Company is authorized to plan for the line of minimums specified below, the Operator/Company must be approved to conduct GPS-based IAP under LOA C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have LOA C384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(2) The Operator/Company with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems must perform a preflight Receiver Autonomous Integrity Monitoring (RAIM) prediction for the airport where the GPS-based IAP will be flown. The Operator/Company must also ensure that the conventional approach (at destination) can be flown without reliance on GPS. The Operator/Company must check Notices to Airmen (NOTAMs) as part of the pre-flight planning activities.

(3) The Operator/Company with TSO-C145() and TSO-C146() navigation systems must review appropriate Aeronautical Information Services (AIS) and NOTAMs for wide area augmentation system (WAAS) service outages.

(4) The Operator/Company 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 Operator/Company 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, unless otherwise authorized. For example, the Operator/Company may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(5) The Operator/Company must use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs 2h(5)(A)-(D), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph 2h(5)(A)	
	Subparagraph 2h(5)(B)	
	Subparagraph 2h(5)(C)	
	Subparagraph 2h(5)(D)	

(A) The Operator/Company has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the Operator/Company may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the Operator/Company may only plan to LNAV (or circling) MDA(h).

(B) The Operator/Company has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, the Operator/Company may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The Operator/Company authorized under LOA C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(C The Operator/Company has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the Operator/Company may only plan to LNAV (or circling) MDA(h).

(D) The Operator/Company has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the Operator/Company may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The Operator/Company authorized under LOA C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

Appendix F. Sample MSpec Paragraph MC055, Alternate Airport IFR Weather Minimums: 14 CFR Part 91 Subpart K

a. The program manager is authorized to derive alternate airport weather minimums from Table 1 below.

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 non-precision approach procedure, or Category I precision approach, or, when applicable, a circling maneuver from an IAP.	Add 400 ft to MDA(H) or DA(H), as applicable.	Add 1 statute mile or 1600 m to the landing minimum.
For airports with at least two operational navigational facilities, each providing a straight-in approach procedure to different suitable runways.	Add 200 ft to higher DA(H) or MDA(H) of the two approaches used.	Add ½ sm or 800 m to the higher authorized landing minimum of the two approaches used.

☐ One useable authorized Category II ILS IAP. 300 feet and ¾ statute mile (1200 m) or RVR 4000 feet (1200 m).
☐ One useable authorized Category III ILS IAP. 200 feet and ½ statute mile (800 m) or RVR 1800 feet (550 m).

b. Special Limitations and Provisions.

(1) The program manager must not use an alternate airport weather minimum other than any applicable minimum derived from Table 1.The program manager must not use any Global Positioning System (GPS)-based instrument approach procedures (IAP) unless the program manager is authorized to conduct GPS-based IAP and meets the requirements in subparagraph b(8).

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

(3) When determining the usability of a runway, wind including gust must be forecast to be within operating limits, including reduced visibility limits, and should be within the manufacturer's maximum demonstrated crosswind.

(4) All conditional forecast elements below the lowest applicable operating minimums must be taken into account. Additives are applied only to the height value (H) to determine the required ceiling.

(5) When dispatching under the provisions of the MEL, those MEL limitations affecting instrument approach minimums must be considered in determining alternate minimums.

(6) For operations outside the United States, because of variations in the international metric weather forecasting standards, 700 m may be used in lieu of 800 m.

(7) Credit for alternate minimums based on Category (CAT) II or CAT III capability is authorized if the program manager is approved for engine inoperative CAT III operations under management specification MC060.

(8) Use of GPS-based IAP minima at an alternate airport.

Note: Examples of GPS-based IAP include GPS, RNAV (GPS), RNAV (RNP).

(a) Before the program manager is authorized to plan for the line of minimums specified below, the program manager must be approved to conduct GPS-based IAP under management specification MC052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports and if applicable, RNAV Required Navigation Performance (RNP) IAP if they have management specification MC384, Required Navigation Performance Procedures with Authorization Required (RNP AR).

(b) The program manager with Technical Standard Order (TSO)-C129() and TSO-C196() navigation systems 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 (NOTAMs) as part of the preflight planning activities.

(c) The program manager with TSO-C145() and TSO-C146() navigation systems 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, unless otherwise authorized. For example, the program manager may use an out-of-service VOR that supports an ILS missed approach procedure at an alternate airport.

(e) The program manager may use GPS-based IAP with the airplane make, model, and series (M/M/S) listed in Table 2 below according to the conditions and limitations in subparagraphs b(8)(e)(i)-(iv), as indicated in the “Conditions and Limitations” column for each airplane M/M/S.

Table 2—GPS-Based Instrument Approach Procedure (IAP) Authorizations

Airplane M/M/S	Conditions and Limitations	Remarks
	Subparagraph (8)(e)(i)	
	Subparagraph (8)(e)(ii)	
	Subparagraph (8)(e)(iii)	
	Subparagraph (8)(e)(iv)	

(i) The program manager has TSO-C129() or TSO-C196() navigation systems that includes fault detection and exclusion (FDE) capability and the program manager may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, if not equipped with barometric vertical navigation (baro-VNAV) the program manager may only plan to LNAV (or circling) MDA(h).

(ii) The program manager has TSO-C129() or TSO-C196() navigation systems that includes FDE capability and equipped with and using baro-VNAV, may utilize GPS-based IAP at either the destination or alternate (not both). At the alternate, the program manager may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The program manager authorized under MSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).

(iii) The program manager has TSO-C145() or TSO-C146() navigation systems and may utilize GPS-based IAP at both the destination and alternate. At the alternate, if not equipped with and using baro-VNAV, the program manager may only plan to LNAV (or circling) MDA(h).

(iv) The program manager has TSO-C145() or TSO-C146() navigation systems and equipped with and using baro-VNAV, may utilize GPS-based IAP at both the destination and alternate. At the alternate, the program manager may plan to LNAV (or circling) MDA(h) or the LNAV/VNAV DA(h). The program manager authorized under MSpec C384, utilizing an RNAV(RNP) IAP at the alternate, must plan no lower than a RNP 0.30 DA(h).