

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.277

National Policy

Effective Date: 10/23/14

Cancellation Date: 10/23/15

SUBJ: OpSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System

- **1. Purpose of This Notice.** This notice provides guidance to Federal Aviation Administration (FAA) principal operations inspectors (POI) for issuance or reissuance of Operations Specification (OpSpec) B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS).
- **2. Audience.** The primary audience for this notice is POIs responsible for approval of OpSpec/Management Specification (MSpec)/Letter of Authorization (LOA) B045. This paragraph applies to any Title 14 of the Code of Federal Regulations (14 CFR) part 91K, 121, 125, 125 subpart M (125M), or 135 operator utilizing a Single Long-Range Communication System (SLRCS) in the West Atlantic Route System (WATRS), Caribbean, or Gulf of Mexico. The secondary audience includes Flight Standards Service (AFS) branches and divisions 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 FAA's 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.** The current template for OpSpec B045 (HQ Rev 03b) is combined for parts 121, 125, and 135. The combined template is confusing with respect to operational control organizations. The combined template also contains conflicts regarding the various communication requirements for each regulatory part. In particular, the current template suggests that a communication gap between the pilot in command (PIC) and the dispatcher is allowed for part 121 flag operations. Such a gap in communications contradicts the regulatory intent of part 121 communication requirements, which are highlighted in recent legal interpretations to part 121, § 121.99. Additionally, OpSpec B045 is limited to operations not exceeding 30 minutes of very high frequency (VHF) coverage. Part 121, 125, and 135 regulations do not specify a specific time limit for SLRCS in this area. To rectify this situation, the Air Transportation Division (AFS-200) is establishing a separate OpSpec B045 template for each regulatory part. The new templates are tailored to the operational control organization and communication requirements of each part.

Distribution: Electronic Only Initiated By: AFS-200

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5. Change in Communication Gap. The current OpSpec B045 template allowed up to a 30-minute gap in VHF communications. This gap was based on the communication requirements of part 91, § 91.511. The communications gap provision of § 91.511 is not applicable to part 121, 125, or 135 operations. It should also be noted that many operators actually petitioned the New York Oceanic air traffic control (ATC) facility to extend the gap beyond 30 minutes. This revision to the OpSpec B045 templates removes the 30-minute time limit restriction under certain conditions. The change also acknowledges the advancements in VHF technology employed by ARINC and Houston Oceanic in the Gulf of Mexico oceanic areas. The OpSpec identifies this area as the Gulf of Mexico Special Provisions Area. The change modifies the authorized area off the coast of New England to align with the area ATC and allows non-minimum navigation performance specification (MNPS) aircraft to operate through the small area of MNPS Airspace (MNPSA) for flights on route L462 via KAYYT intersection. Finally, the change removes the requirement to have an LOA from the ATC facility.

- **6. System Impact.** The revision to the OpSpec B045 templates will allow for greater flight planning flexibility while maintaining a high level of voice communication reliability. This is accomplished by requiring the aircraft to have an operative satellite voice (SATVOICE) radio, or the maintenance history on the specific aircraft is tracked and the minimum equipment list (MEL) history in the past 30 days indicates no more than two failures of the high frequency (HF) radio system.
- **7. One-Time Flight Approval.** Operators who do not have a SATVOICE radio installed and operational, and whose aircraft has MEL history that exceeds two failures in 30 days, may conduct one flight through the designated airspace in OpSpec B045, provided the HF radio is signed off and operative.
- **8. Action.** This is a mandatory change to OpSpec B045. POIs must advise the operators for whom they are responsible, of the change and the contents of this notice. POIs must issue the new B045 template, which is HQ REV 040, no later than 6 months from the publication date of this notice. Operators must be able to comply with the Special Limitations and Provision of B045 before a POI may issue the new template.
- **9. Disposition.** The information in this notice will be incorporated into FAA Order 8900.1, Flight Standards Information Management System (FSIMS). It will expire 1 year from the effective date and will no longer be applicable. Questions concerning this notice should be directed to the New Program Implementation Branch (AFS-240) at 202-267-8166.

Michael Zenkovich

Deputy Director, Flight Standards Service

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Appendix A. Sample OpSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 121

- a. In accordance with 14 CFR part 121, § 121.351(c) and the limitations and provisions of this operations specification, the certificate holder is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this operations specification.
- b. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico. This operations specification must be referenced in paragraph B050 of these operations specifications.
- c. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)

d. <u>Limitations and Provisions</u>.

- (1) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (2) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communication systems (LRCS), the use of the SLRCS must be in accordance with the certificate holder's approved minimum equipment list (MEL).
- (3) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (4) Except as provided in subparagraph e of this operations specification:
- (a) The certificate holder monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller must be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication must be directed to the communications service provider (CSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (5) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph d(4)(b) above, to verify its functionality.
 - (6) No person may allow the flight to enter oceanic airspace unless:
- (a) Rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- (b) For part 121 flag operations, reliable and rapid two-way voice or data communications between the aircraft and the appropriate dispatch center can be maintained in accordance with § 121.99.
- (c) For part 121 supplemental operations, reliable and rapid two-way voice or data communication between the aircraft and the certificate holder can be maintained in accordance with § 121.122.
- e. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (1) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico, the aircraft dispatcher (or person designated to exercise operational control for supplemental operations) and the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted. When VHF voice communication is not available directly with ATS facilities or via general purpose facilities using VHF communication the operator must use the SLRCS (HF) listed in Table 1 of this operations specification.
- (2) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used. General purpose facilities provide VHF and HF communications capability and will be responsible for the relay of position reports and other information between the aircraft and ATS facilities.

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(3) The requirements of §§ 121.99 and 121.122, as applicable, must be met at all times. For the purposes of operational control communication, if a VHF ground station is inoperative the PIC and aircraft dispatcher must find that communication facilities equal to the inoperative VHF network are available and are in satisfactory operating condition. Refer to § 121.607(b).

f. <u>Required Training.</u> Prior to exercising the authority provided by this operations specification, the certificate holder must provide training to its aircraft dispatchers, persons designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.

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Appendix B. Sample OpSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 125

- a. In accordance with 14 CFR part 125, § 125.203(f) and the limitations and provisions of this operations specification, the certificate holder is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this operations specification.
- b. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico. This operations specification must be referenced in paragraph B050 of these operations specifications.
- c. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)	

- d. Limitations and Provisions.
- (1) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (2) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communication systems (LRCS), the use of the SLRCS must be in accordance with the certificate holder's approved minimum equipment list (MEL).
- (3) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (4) Except as provided in subparagraph e of this operations specification:
- (a) The certificate holder monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller must be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication must be directed to the communications service provider (CSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (5) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph d(4)(b) above, to verify its functionality.
- (6) No person may allow the flight to enter oceanic airspace unless rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- e. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (1) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico, the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted. When VHF voice communication is not available directly with ATS facilities or via general purpose facilities using VHF communication, the operator must use the SLRCS (HF) listed in Table 1 of this operations specification.
- (2) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used. General purpose facilities provide VHF and HF communications capability and will be responsible for the relay of position reports and other information between the aircraft and ATS facilities.
- f. <u>Required Training.</u> Prior to exercising the authority provided by this operations specification, the certificate holder must provide training to its operations personnel designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.

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Appendix C. Sample OpSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 135

- a. In accordance with 14 CFR part 135, § 135.165(g) and the limitations and provisions of this operations specification, the certificate holder is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this operations specification.
- b. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico. This operations specification must be referenced in paragraph B050 of these operations specifications.
- c. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)

d. <u>Limitations and Provisions.</u>

- (1) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (2) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communication systems (LRCS), the use of the SLRCS must be in accordance with the certificate holder's approved minimum equipment list (MEL).
- (3) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (4) Except as provided in subparagraph e of this operations specification:
- (a) The certificate holder monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller must be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication must be directed to the communications service provider (CSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (5) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph d(4)(b) above, to verify its functionality.
- (6) No person may allow the flight to enter oceanic airspace unless rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- e. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (1) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico, the aircraft dispatcher (or person designated to exercise operational control for supplemental operations) and the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted. When VHF voice communication is not available directly with ATS facilities or via general purpose facilities using VHF communication the operator must use the SLRCS (HF) listed in Table 1 of this operations specification.
- (2) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used. General purpose facilities provide VHF and HF communications capability and will be responsible for the relay of position reports and other information between the aircraft and ATS facilities.
- f. <u>Required Training.</u> Prior to exercising the authority provided by this operations specification, the certificate holder must provide training to its aircraft dispatchers, persons designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.

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Appendix D. Sample OpSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 121/135

- a. In accordance with 14 CFR part 121, § 121.351(c) or 14 CFR part 135, § 135.165(g), as applicable, and the limitations and provisions of this operations specification, the certificate holder is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this operations specification.
- b. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico. This operations specification must be referenced in paragraph B050 of these operations specifications.
- c. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)

d. Limitations and Provisions.

- (1) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (2) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communication systems (LRCS), the use of the SLRCS must be in accordance with the certificate holder's approved minimum equipment list (MEL).
- (3) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (4) Except as provided in subparagraph e of this operations specification:
- (a) The certificate holder monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The certificate holder must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller must be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication must be directed to the communications service provider (ANSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (5) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph d(4)(b) above, to verify its functionality.
 - (6) No person may allow the flight to enter oceanic airspace unless:
- (a) Rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- (b) For part 121 flag operations, reliable and rapid two-way voice or data communications between the aircraft and the appropriate dispatch center can be maintained in accordance with § 121.99.
- (c) For part 121 supplemental operations, reliable and rapid two-way voice or data communication between the aircraft and the certificate holder can be maintained in accordance with § 121.122.
- e. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (1) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico, the aircraft dispatcher (or person designated to exercise operational control for supplemental operations) and the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted. When VHF voice communication is not available directly with ATS facilities or via general purpose facilities using VHF communication the operator must use the SLRCS (HF) listed in Table 1 of this operations specification.
- (2) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used. General purpose facilities provide VHF and HF communications capability and will be responsible for the relay of position reports and other information between the aircraft and ATS facilities.

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(3) When operating under part 121, the requirements of §§ 121.99 and 121.122, as applicable, must be met at all times. For the purposes of operational control communication, if a VHF ground station is inoperative the PIC and aircraft dispatcher must find that communication facilities equal to the inoperative VHF network are available and are in satisfactory operating condition. Refer to § 121.607(b).

f. <u>Required Training.</u> Prior to exercising the authority provided by this operations specification, the certificate holder must provide training to its aircraft dispatchers, persons designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.

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Appendix E. Sample MSpec B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 91K

- a. In accordance with 14 CFR part 91, § 91.511(f) and the limitations and provisions of this management specification, the program manager is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this management specification.
- b. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico. This management specification must be referenced in paragraph MB050 of these management specifications.
- c. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)	

d. <u>Limitations and Provisions.</u>

- (1) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (2) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communication systems (LRCS), the use of the SLRCS must be in accordance with the management specification's approved minimum equipment list (MEL).
- (3) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (4) Except as provided in subparagraph e of this management specification:
- (a) The program manager monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The management specification must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The management specification must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller must be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication must be directed to the communications service provider (CSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (5) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph d(4)(b) above, to verify its functionality.
- (6) No person may allow the flight to enter oceanic airspace unless rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- (7) When used in conjunction MB054 Class II Navigation using a Single Long-Range Navigation System (S-LRNS), the area of operation with a SLRCS is limited to 30 minutes beyond the range of ATC VHF coverage.
- e. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (1) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico, the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted.
- (2) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used.
- f. <u>Required Training.</u> Prior to exercising the authority provided by this management specification, the program manager must provide training to its operations personnel designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.

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Appendix F. Sample LOA B045, Extended Overwater Operations Using a Single Long-Range Communication System (SLRCS): 14 CFR Part 125M

- 1. The Operator/Company authorized to conduct operations in accordance with the Letter of Deviation Authority (LODAA125) is authorized to conduct extended overwater operations using the Single Long-Range Communication System(s) (SLRCS), listed in Table 1 of this letter of authorization, in accordance with 14 CFR part 125, § 125.203(f) and the limitations and provisions of this letter of authorization.
- 2. This authorization is limited to those areas of en route operation, Atlantic Ocean-West Atlantic Route System (WATRS), Caribbean Sea Including the islands/Nations and the Havana flight information region (FIR), and the Gulf of Mexico, where this letter of authorization is referenced in letter of authorization paragraph B050 of these authorizations.
- 3. <u>Authorized Aircraft and Equipment.</u>

Table 1—Authorized Aircraft and Equipment

Aircraft Type (M/M/S)	Long-Range Communication System (Manufacturer/Model)

4. <u>Limitations and Provisions.</u>

- (a) The SLRCS used must be a unit that employs HF, or other approved communication systems which extend beyond line-of-sight.
- (b) The SLRCS must be fully functional. If the aircraft is equipped with at least two long-range communications systems (LRCS), the use of the SLRCS must be in accordance with the certificate holder's approved minimum equipment list (MEL).
- (c) The area of operation permitted is defined by the following description and excludes all the North Atlantic Minimum Navigation Performance Specifications (NAT/MNPS) airspace:
 - Beginning at 44 degrees 47'20" N/67 degrees 00'00" W.
 - Hence to 38 degrees 30'00" N/67 degrees 00'00" W.
 - Hence to 38 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/60 degrees 00'00" W.
 - Hence to 27 degrees 00'00" N/58 degrees 00'00" W.
 - Hence to 07 degrees 46'00" N/58 degrees 00'00" W.
 - Then northwestward along the adjacent coastline of South America, the eastern coastline of Central America, north to the CUN VOR, North East to the EYW VOR then north along the eastern coastline of the United States to the beginning point.
 - (d) Except as provided in subparagraph 5 of this letter of authorization:
- (1) The Operator/Company monitors the mechanical reliability of the HF communication system. Within the preceding 30 days if the HF radio system (both HF radios if two are installed) has been placed on MEL more than twice, the operator is restricted from operating that aircraft in oceanic operations, except one flight to return it to an area of operation that does not require use of HF communications; or

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- (i) For aircraft that meet the requirements of the network access switch: The Operator/Company must include the appropriate SATVOICE communication system code in item 10A, and six-character hexadecimal code in item 18, of the Air Traffic Service (ATS) Flight Plan (FPL).
- (ii) For aircraft that do not meet the requirements of the network access switch: The Operator/Company must include the appropriate SATVOICE communication system code in item 10A of the ATS FP. Additionally, the Air Navigation Service Provider (ANSP) must be provided the aircraft-specific phone number for each aircraft.
- (iii) Direct communication with the controller shall be limited to emergency and non-normal conditions. Normal and routine SATVOICE communication shall be directed to the communications service provider (CSP) for the area of operations (ARINC) in which the aircraft is operating; and
- (iv) The flightcrew must have the continued ability to comply with International Civil Aviation Organization (ICAO) Annex 2, Rules of the Air, communication requirements.
- (e) Prior to entering oceanic airspace, the PIC must perform a functional check on the HF and SATVOICE backup, if operating under the provision of subparagraph 4(d)(2) above, to verify its functionality.
- (f) No person may allow the flight to enter oceanic airspace unless rapid and reliable two-way communication can be maintained with the ATC facility controlling the airspace.
- 5. <u>Special Provisions Area over the Gulf of Mexico.</u> Communications with ATC facilities and long-range communications service providers in the Gulf of Mexico are available via VHF voice.
- (a) Prior to conducting operations in the Special Provisions Area over the Gulf of Mexico the PIC must review the appropriate NOTAMs, and verify that there are no reported or anticipated lapses in VHF voice capability for ATS during the period of time in which the flight will be conducted. When VHF voice communication is not available directly with ATS facilities or via general purpose facilities using VHF communication the operator must use the SLRCS (HF) listed in Table 1 of this operations specification.
- (b) If, at any time during flight, two-way VHF voice radio communications cannot be maintained directly with the controlling ATS facility, general purpose communication facilities such as ARINC must be used. General purpose facilities provide VHF and HF communications capability and will be responsible for the relay of position reports and other information between the aircraft and ATS facilities.
- 6. <u>Required Training.</u> Prior to exercising the authority provided by this letter of authorization, the Operator/Company must provide training to its personnel designated to exercise operational control, and flightcrew members, on the application of this authorization, including all of the limitations, provisions and special provisions, contained herein.