

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.297

**National Policy** 

Effective Date: 5/7/15

Cancellation Date: 5/7/16

SUBJ: OpSpec/MSpec/LOA A056, Data Link Communications

- 1. Purpose of This Notice. This notice provides new guidance for Federal Aviation Administration (FAA) certificate-holding district offices (CHDO) and principal inspectors (PI) assigned to operators conducting operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 91 subpart K (part 91K), 121, 125 (including Letter of Deviation Authority (LODA) holders, designated in the Web-based Operations Safety System (WebOPSS) as 125M operations), and 135. This notice establishes the application and approval authority for Operations Specification (OpSpec)/Management Specification (MSpec)/Letter of Authorization (LOA) A056, Data Link Communications.
- **2. Audience.** The primary audience for this notice is FAA CHDOs and PIs assigned to operators conducting airplane operations under parts 91, 91K, 121, 125 (including A125 LODA holders), and 135. The secondary audience includes Flight Standards (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.

a. OpSpec/MSpec/LOA A056 Approval Authority. Since data link communications (Future Air Navigation System (FANS)/Aeronautical Telecommunications Network (ATN)/Controller-Pilot Data Link Communication (CPDLC)/Automatic Dependent Surveillance-Contract (ADS-C)) was a relatively new technology when A056 was developed, it was determined that this OpSpec/MSpec/LOA should be designated as requiring HQ-level coordination prior to issuance. The thought process was to ensure the knowledge and quality of A056 applications were consistent throughout the regions, and at the same time allow field inspectors to gain a greater understanding of data link and the documentation required to issue A056. Due to intermediate work done by the region All Weather Operations (AWO) and Special Areas of Operations (SAO) inspectors, HQ has seen a consistent quality of incoming A056 applications and determined there is no further requirement for HQ coordination. A056 now only

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requires region (AXX-220) concurrence. This change will be incorporated into Advisory Circular (AC) 120-70C, Operational Authorization Process for Use of Data Link Communication System, and FAA Order 8900.1, Volume 3, Chapter 18, Section 3, Part A Operations Specifications—General.

### b. Explanation of Policy Changes.

- (1) This notice contains the following:
  - The sample OpSpec A056 template in Appendix A applies to part 121.
  - The sample OpSpec A056 template in Appendix B applies to part 125.
  - The sample OpSpec A056 template in Appendix C applies to part 135.
  - The sample OpSpec A056 template in Appendix D applies to part 121/135.
  - The sample MSpec MA056 template in Appendix E applies to part 91K.
  - The sample LOA A056 template in Appendix F applies to part 91.
  - The sample LOA A056 template in Appendix G applies to part 125M (A125 LODA holder).
- (2) Due to the recent implementation of European data link and the imminent implementation of U.S. domestic CPDLC departure clearances (CPDLC-DCL), the attached templates have been revised to include the following:
- (a) A column has been added in Table 1, Authorized Aircraft and Equipment for Data Link, to designate which type of data link system is authorized (i.e., FANS or ATN).
- (b) For foreign domestic, oceanic, and/or remote operations, data link communications may now be conducted during ground operations as well as departure, arrival, and the en route phase of flight.
- (c) For U.S. domestic operations, data link communications may be conducted during ground operations only. Part 91 operators do not require authorization to operate CPDLC-DCL as long as they have acceptable CPDLC-DCL training (to include the ground system), know how it interacts with their specific avionics equipment, and have the preferred Original Equipment Manufacturer (OEM) annotation in their Airplane Flight Manual (AFM).
- (d) The requirement for aircraft conducting data link operations to be equipped with an approved collision avoidance system that is on and operating has been deleted. This requirement is already covered in 14 CFR.
  - (3) Effective with this notice, region concurrence is required prior to issuing A056.
- **5. Action.** PIs should provide this notice to the operators for whom they are responsible, alerting them to the updated A056 application approval authority, the updated documentation requirements, and the changes to the authorization templates. Operators with previously issued A056 are not required to resubmit an application at this time, but must provide data link communications system information (e.g., FANS, ATN, or both) to complete Table 1, their CPDLC-DCL training (i.e., flight bulletin), and flightcrew procedures. Once PIs receive and

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approve this information, they will complete Table 1 and reissue the authorization. If an operator does not submit the information above or does not want authorization to use data link during ground operations for a specific fleet, PIs should issue the new template with a comment in the remarks section, "no CPDLC-DCL ops." In order to meet domestic data link communication implementation timelines and allow maximum operator participation, this authorization is mandatory, with a compliance date of 30 days from the template HQ control date.

**6. Disposition.** We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions or comments concerning this notice to the Flight Technologies and Procedures Division (AFS-400) at 202-267-8790.

ORIGINAL SIGNED by

/s/ John Barbagallo Deputy Director, Flight Standards Service

### Appendix A. Sample OpSpec A056, Data Link Communications: 14 CFR Part 121

- a. The certificate holder is authorized to conduct data link communications in accordance with the limitations and provisions of this operations specification.
- b. <u>Authorized Aircraft and Equipment for Data Link.</u> The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- c. The certificate holder is authorized to conduct operations using data link communications in the areas listed in paragraph B050 of these operations specifications where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
  - (1) For data link operations within the United States:
- (a) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (b) Data link communications may be conducted during ground operations only.
- (2) For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- (3) Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- (4) Flightcrews must have completed the certificate holder's approved training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (a) All STC and AFM limitations.
  - (b) All provisions applicable to the use and operation of the installed data link system.
- (c) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- d. <u>Aircraft Maintenance</u>. The certificate holder must incorporate into their maintenance program the data link equipment or systems manufacturer's requirements for maintenance, and instructions for continued airworthiness for the data link equipment and aircraft listed in Table 1 of this operations specification. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

### Appendix B. Sample OpSpec A056, Data Link Communications: 14 CFR Part 125

- a. The certificate holder is authorized to conduct data link communications in accordance with the limitations and provisions of this operations specification.
- b. <u>Authorized Aircraft and Equipment for Data Link.</u> The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- c. The certificate holder is authorized to conduct operations using data link communications in the areas listed in paragraph B050 of these operations specifications where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
  - (1) For data link operations within the United States:
- (a) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (b) Data link communications may be conducted during ground operations only.
- (2) For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- (3) Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- (4) Flightcrews must have completed the certificate holder's approved training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (a) All STC and AFM limitations.
  - (b) All provisions applicable to the use and operation of the installed data link system.
- (c) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- d. <u>Aircraft Maintenance</u>. The certificate holder must incorporate into their maintenance program the data link equipment or systems manufacturer's requirements for maintenance, and instructions for continued airworthiness for the data link equipment and aircraft listed in Table 1 of this operations specification. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

### Appendix C. Sample OpSpec A056, Data Link Communications: 14 CFR Part 135

- a. The certificate holder is authorized to conduct data link communications in accordance with the limitations and provisions of this operations specification.
- b. <u>Authorized Aircraft and Equipment for Data Link.</u> The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- c. The certificate holder is authorized to conduct operations using data link communications in the areas listed in paragraph B050 of these operations specifications where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS 1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
  - (1) For data link operations within the United States:
- (a) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (b) Data link communications may be conducted during ground operations only.
- (2) For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- (3) Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- (4) Flightcrews must have completed the certificate holder's approved training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (a) All STC and AFM limitations.
  - (b) All provisions applicable to the use and operation of the installed data link system.
- (c) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- d. <u>Aircraft Maintenance</u>. The certificate holder must incorporate into their maintenance program the data link equipment or systems manufacturer's requirements for maintenance, and instructions for continued airworthiness for the data link equipment and aircraft listed in Table 1 of this operations specification. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

## Appendix D. Sample OpSpec A056, Data Link Communications: 14 CFR Part 121/135

- a. The certificate holder is authorized to conduct data link communications in accordance with the limitations and provisions of this operations specification.
- b. <u>Authorized Aircraft and Equipment for Data Link.</u> The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- c. The certificate holder is authorized to conduct operations using data link communications in the areas listed in paragraph B050 of these operations specifications where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
  - (1) For data link operations within the United States:
- (a) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (b) Data link communications may be conducted during ground operations only.
- (2) For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- (3) Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- (4) Flightcrews must have completed the certificate holder's approved training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (a) All STC and AFM limitations.
  - (b) All provisions applicable to the use and operation of the installed data link system.
- (c) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- d. <u>Aircraft Maintenance</u>. The certificate holder must incorporate into their maintenance program the data link equipment or systems manufacturer's requirements for maintenance, and instructions for continued airworthiness for the data link equipment and aircraft listed in Table 1 of this operations specification. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

# Appendix E. Sample MSpec MA056, Data Link Communications: 14 CFR Part 91 Subpart K

- a. The certificate holder is authorized to conduct data link communications in accordance with the limitations and provisions of this management specification.
- b. <u>Authorized Aircraft and Equipment for Data Link.</u> The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- c. The certificate holder is authorized to conduct operations using data link communications in the areas listed in paragraph B050 of these management specifications where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
  - (1) For data link operations within the United States:
- (a) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (b) Data link communications may be conducted during ground operations only.
- (2) For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- (3) Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- (4) Flightcrews must have completed the program manager's approved training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (a) All STC and AFM limitations
  - (b) All provisions applicable to the use and operation of the installed data link system
- (c) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- d. <u>Aircraft Maintenance</u>. The program manager must incorporate into their maintenance program the data link equipment or systems manufacturer's requirements for maintenance, and instructions for continued airworthiness for the data link equipment and aircraft listed in Table 1 of this management specification. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

## Appendix F. Sample LOA A056, Data Link Communications: 14 CFR Part 91

### <u>Letter of Authorization</u> **Data Link Communications**

- 1. The Operator listed at the bottom of this document is authorized to conduct data link communications in accordance with the limitations and provisions of this Letter of Authorization (LOA).
- 2. The Operator is authorized to conduct data link operations in airspace where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions:
- a. For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- 3. <u>Authorized Aircraft and Equipment for Data Link Communications</u>. This LOA authorizes the Operator to operate the aircraft and FAA-certified data link communication systems listed in Table 1 below in the conduct of en route data link operations:

A/C Serial Number	Registration No.	Aircraft M/M/S	Data Link M/M/S	FANS/ATN	Remarks

- 4. <u>Flightcrew Training.</u> Flightcrews must have completed an accepted training program, as described in this authorization, prior to conducting data link operations. The Operator shall provide training conducted by \_\_\_\_\_\_ for the flightcrews using data link communications in accordance with the following:
- a. Recurrent Training. Recurrent training for digital communications should address any significant issues identified by operating experience, system changes, procedural changes, or unique characteristics.
  - b. Flightcrews must be familiar with and comply with the following:
    - (1) All STC and AFM limitations and procedures.
    - (2) All provisions applicable to the use and operation of the installed data link system.
- (3) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.
- (4) When conducting instrument approach procedures, pilots are responsible to obtain and use the appropriate altimeter setting in accordance with 14 CFR part 97, § 97.20. Data link-issued altimeter settings are excluded for this purpose.

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5. <u>Voice Communications Requirement.</u> Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF radios along the entire route of flight.

- 6. Operator's Responsibilities Regarding Data Link Communications.
- a. Verify data link communications functionality for each environment to be used and when new or modified components or software are introduced.
  - b. Ensure followup and evaluation of exceptional data link events (i.e., data link event reporting).
- c. Ensure that appropriate data link communication software updates are incorporated when necessary, and that both air and ground systems are able to identify and properly respond to the installed level of data link communication capability.
- d. Establish data link communications "return to service" policies to ensure proper data link communications functions when an aircraft is returned to service after a data link communication failure or maintenance action.
- e. Ensure that the maintenance program includes the appropriate airworthiness requirements for the installed data link communication system.
- f. Provide adequate data link communication maintenance training in accordance with the appropriate regulation to ensure that their maintenance personnel or contract maintenance personnel at facilities not staffed by the Operator are able to properly implement digital communications-related maintenance programs. This includes, but is not limited to, addressing installation, modification, correction of reported system discrepancies, use of test equipment, procedures, MEL relief, and "return-to-service" authorizations.
- g. The Operator's aircraft inspection program must be revised to include the appropriate airworthiness requirements for the installed data link communication equipment.
- 7. Operators must formulate necessary data link communications revisions to their MEL(s) for each particular fleet (e.g., B737, DC10). MEL revisions must be consistent with the FAA's MMEL established for each aircraft type.
- 8. <u>Responsible Person.</u> The Responsible Person for crew operations may be either an agent for service (who must be a U.S. citizen) or a person who is a U.S. citizen or holds a U.S. pilot certificate and accepts responsibility for complying with the stated regulations by signing this document.
- a. If the Responsible Person signing this LOA relinquishes responsibility, this LOA becomes invalid.
- b. Enter the name, email address, and telephone number in Table 2 of the Responsible Person signing this LOA:

Table 2 – Responsible Person

Name	Email Address	Telephone

# Appendix G. Sample LOA A056, Data Link Communications: 14 CFR Part 125M (A125 LODA)

### <u>Letter of Authorization</u> <u>Data Link Communications</u>

- 1. The Operator/Company, authorized to conduct operations in accordance with the Letter of Deviation Authority (A125 LODA), is authorized to conduct data link communications in accordance with the limitations and provisions of this Letter of Authorization (LOA).
- 2. <u>Authorized Aircraft and Equipment for Data Link.</u> The Operator/Company is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

Aircraft M/M/S	Data Link System M/M/S	FANS/ATN	Remarks

- 3. The Operator/Company is authorized to conduct operations using data link communications in the areas listed in LOA B050 of these authorizing documents where the Air Traffic Service (ATS) infrastructure supports the use of Future Air Navigation System (FANS 1/A or equivalent) ATC data link equipment and/or Aeronautical Telecommunications Network (ATN)-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions.
  - a. For data link operations within the United States:
- (1) Operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
  - (2) Data link communications may be conducted during ground operations only.
- b. For data link operations outside the United States, data link communications may be conducted, as applicable, during ground operations, departures, arrivals and the en route phase of flight.
- c. Data link messages with ATS may be used as a supplement to voice communications. Voice communications must be continually monitored since there is still a requirement for the aircraft to be equipped with operating VHF voice and, when required, HF voice radios along the entire route of flight.
- d. Flightcrews must have completed the Operator/Company's training program prior to conducting data link operations. Flightcrews must be familiar with and comply with:
  - (1) All STC and AFM limitations.
  - (2) All provisions applicable to the use and operation of the installed data link system.

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(3) Regulations, policies and procedures applicable in individual countries and/or flight information regions (FIR), as published in documents such as Aeronautical Information Publications and NOTAMs.

4. The Operator/Company's maintenance program must be revised to include the appropriate airworthiness requirements for the installed data link communication system.