SUBJ: OPSPEC/MSPEC/LOA A056 Data Link Communications

1. **Purpose of This Notice.** This notice revises operations specifications (OpSpec), management specifications (MSpec), and letters of authorization (LOA) A056.

2. **Audience.** The primary audience for this notice is Federal Aviation Administration certificate-holding district offices (CHDO) and principal operations inspectors (POI) assigned to operators conducting airplane operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 91 subpart K (91K), 121, 125 (including the Letter of Deviation Authority A125 operators), and 135. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.

3. **Where You Can Find This Notice.** Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators may find this information at: http://fsims.faa.gov.

4. **Explanation of Policy Changes.** The Flight Technologies and Procedures Division, AFS-400, in conjunction with the Air Transportation Division, AFS-200, General Aviation and Commercial Aviation Division, AFS-800, and industry members of the Operations Specification Working Group developed this notice. This notice contains the following:

- The sample OpSpec A056 template in Appendix A that applies to part 121.
- The sample OpSpec A056 template in Appendix B that applies to part 125.
- The sample OpSpec A056 template in Appendix C that applies to part 135.
- The sample MSpec MA056 template in Appendix D that applies to part 91K.
- The sample LOA A056 template in Appendix E that applies to part 91.
- The sample LOA A056 template in Appendix F that applies to part 125M.

**Note:** The guidance for inspectors that the FAA will incorporate will be located in FSIMS, Order 8900.1, Volume 3, Chapter 18, Section 3, Part A Operations Specifications—General.
5. **Action.** The principal maintenance inspector (PMI) and/or principal avionics inspector (PAI) should review the procedures for maintaining the aircraft and data link equipment to assure continuous operational performance of the data link system. Coordination between all three principal inspectors (POI, PAI, PMI) is mandatory. POIs should review the revised guidance for issuance of paragraph A056. POIs must provide this notice to the operators for whom they are responsible, alerting them to updated operating procedures and required pilot knowledge and training. This authorization is mandatory, with a compliance date of 120 days from the date of this notice.

6. **Disposition.** We will permanently incorporate the information in this notice to FSIMS before this notice expires. Direct questions or comments concerning this notice to the Flight Operations Branch, AFS-410, at (202) 385-4623/4586.

ORIGINAL SIGNED by
John W. McGraw for

John M. Allen
Director, Flight Standards Service
Appendix A. Sample OpSpec Paragraph A056, Data Link Communications:
14 CFR Part 121

a. The certificate holder is authorized to conduct en route data link communications in accordance with the limitations and provisions of this operations specification.

b. Authorized Aircraft and Equipment for Data Link. The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

<table>
<thead>
<tr>
<th>Aircraft M/M/S</th>
<th>Data Link System M/M</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABL01</td>
<td>TABL02</td>
<td>TABL03</td>
</tr>
</tbody>
</table>

c. The certificate holder is authorized to conduct en route 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) air traffic control 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) All aircraft conducting domestic operations using data link communications with ATS must be equipped with an approved collision avoidance system that is on and operating.
(2) Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.
(3) Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
(4) Data link messages with air traffic services 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.
(5) 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, as published in documents such as Aeronautical Information Publications (AIP) and NOTAMS.

d. Aircraft Maintenance. 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 OpSpec. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

TEXT99
Appendix B. Sample OpSpec Paragraph A056, Data Link Communications: 14 CFR Part 125

a. The certificate holder is authorized to conduct en route data link communications in accordance with the limitations and provisions of this operations specification.

b. Authorized Aircraft and Equipment for Data Link. The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified Data Link communication systems:

<table>
<thead>
<tr>
<th>Aircraft M/M/S</th>
<th>Data Link System M/M</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABL01</td>
<td>TABL02</td>
<td>TABL03</td>
</tr>
</tbody>
</table>

c. The certificate holder is authorized to conduct en route 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) air traffic control 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) All aircraft conducting domestic operations using data link communications with ATS must be equipped with an approved collision avoidance system that is on and operating.
(2) Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.
(3) Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
(4) Data link messages with air traffic services 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.
(5) Flightcrews must have completed the certificate holder’s 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, as published in documents such as Aeronautical Information Publications (AIP) and NOTAMS.

d. Aircraft Maintenance. 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 OpSpec. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

TEXT99
Appendix C. Sample OpSpec Paragraph A056, Data Link Communications: 14 CFR Part 135

a. The certificate holder is authorized to conduct en route data link communications in accordance with the limitations and provisions of this operations specification.

b. Authorized Aircraft and Equipment for Data Link Communications. The certificate holder is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

<table>
<thead>
<tr>
<th>Aircraft M/M/S</th>
<th>Data Link System M/M</th>
<th>Remarks</th>
</tr>
</thead>
</table>

Table 1 – Authorized Aircraft and Equipment for Data Link

(1) All aircraft conducting domestic operations using data link communications with ATS must be equipped with an approved collision avoidance system that is on and operating.
(2) Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.
(3) Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
(4) Data link messages with air traffic services 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.
(5) 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, as published in documents such as Aeronautical Information Publications (AIP) and NOTAMS.

d. Aircraft Maintenance. 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 OpSpec. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.
Appendix D. Sample MSpec Paragraph MA056, Data Link Communications: 14 CFR Part 91 Subpart K

a. The program manager is authorized to conduct en route data link communications in accordance with the limitations and provisions of this management specification.

b. Authorized Aircraft and Equipment for Data Link. The program manager is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

<table>
<thead>
<tr>
<th>Aircraft M/M/S</th>
<th>Data Link System M/M</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABL01</td>
<td>TABL02</td>
<td>TABL03</td>
</tr>
</tbody>
</table>

c. The program manager is authorized to conduct en route operations using data link communications in the areas listed in paragraph MB050 of these management specifications where the air traffic service (ATS) infrastructure supports the use of Future Air Navigation System (FANS-1/A or equivalent) air traffic control data link equipment and/or Aeronautical Telecommunications Network-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions.

(1) All aircraft conducting domestic operations using data link communications with ATS must be equipped with an approved collision avoidance system that is on and operating.
(2) Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.
(3) Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).
(4) Data link messages with air traffic services 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.
(5) 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, as published in documents such as Aeronautical Information Publications (AIP) and NOTAMS.

d. Aircraft Maintenance. 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 OpSpec. This includes cleaning, inspection, adjusting, testing, lubricating, and any other specified requirements.

TEXT99
Appendix E. Sample LOA A056, Data Link Communications: 14 CFR Part 91

Letter of Authorization
Data Link Communications

1. The operator listed at the bottom of this document is authorized to conduct en route data link communications in accordance with the limitations and provisions of this Letter of Authorization (LOA).

2. The Operator is authorized to conduct en route 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) air traffic control 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. All aircraft conducting domestic data link operations must be equipped with an FAA-certified collision avoidance system that is on and operating.
   b. Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.
   c. Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).

3. Authorized Aircraft and Equipment for Data Link Communications. 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:

   Table 1 - Authorized Aircraft and Equipment for Data Link

<table>
<thead>
<tr>
<th>A/C Serial Number</th>
<th>Registration No.</th>
<th>Aircraft M/M/S</th>
<th>Data Link M/M/S</th>
<th>Remarks</th>
</tr>
</thead>
</table>

4. Flightcrew Training. 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 TEXT02 for the flightcrews using data link communications in accordance with the following:

   a. All aircraft conducting domestic operations using data link communications with air traffic services must be equipped with an approved collision avoidance system that is on and operating.
   b. Recurrent Training. Recurrent training for digital communications should address any significant issues identified by operating experience, system changes, procedural changes, or unique characteristics.
   c. 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, as published in documents such as Aeronautical Information Publications and Notices to Airmen.
      (4) When conducting instrument approach procedures, pilots are responsible to obtain and use the appropriate altimeter setting in accordance with 14 CFR § 97.20. Data link-issued altimeter settings are excluded for this purpose.

5. Voice Communications Requirement. Data link messages with air traffic services 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. Assure followup and evaluation of exceptional data link events.
   c. Assure that appropriate data link communication software updates are incorporated when necessary, and that both air and ground system 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, if required, 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, minimum equipment list (MEL) relief, and “return-to-service” authorizations.
   g. The Operator’s continuous airworthiness maintenance 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. Responsible Person. 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>
<thead>
<tr>
<th>Name</th>
<th>Email Address</th>
<th>Telephone</th>
</tr>
</thead>
</table>

   TEXT99
Appendix F. Sample LOA A056, Data Link Communications: 14 CFR Part 125M

Letter of Authorization
Data Link Communications

1. The Operator/Company, authorized to conduct operations in accordance with the Letter of Deviation Authority (LODA A125), is authorized to conduct en route data link communications in accordance with the limitations and provisions of this Letter of Authorization (LOA).

2. Authorized Aircraft and Equipment for Data Link. The Operator/Company is authorized to conduct data link communications using the following aircraft and FAA-certified data link communication systems:

<table>
<thead>
<tr>
<th>Aircraft M/M/S</th>
<th>Data Link System M/M</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABL01</td>
<td>TABL02</td>
<td>TABL03</td>
</tr>
</tbody>
</table>

3. The Operator/Company is authorized to conduct en route 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) air traffic control data link equipment and/or Aeronautical Telecommunications Network-compliant digital data link communications equipment, as applicable, in accordance with the following limitations and provisions.

   a. All aircraft conducting domestic operations using data link communications with ATS must be equipped with an approved collision avoidance system that is on and operating.

   b. Data link communications may be conducted only during the en route phase of flight, or departures and arrivals as applicable, to include domestic, foreign domestic, oceanic or remote airspace.

   c. Domestic data link operations must be conducted in an environment where air traffic surveillance is available (e.g., radar or ADS-B).

   d. 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.

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