NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.234

National Policy

Effective Date:
8/30/13

Cancellation Date:
8/30/14

SUBJ: OpSpec C059, Category II Instrument Approach and Landing Operations

1. Purpose of This Notice. This notice provides revised guidance for Federal Aviation Administration (FAA) 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 (part 91K), 121, 125 (including the Letter of Deviation Authority (LODA) 125M operators), 129, and 135. This notice amends and clarifies the authorization (operations specification (OpSpec)/management specification (MSpec)/letter of authorization (LOA) C059) for Category II (CAT II) instrument approach and landing operations. This notice amends all C059 templates (i.e., OpSpec/MSpec/LOA C059) for operators conducting airplane operations under parts 91, 91K, 121, 125 (including the LODA 125M operators), 129, and 135. This is a mandatory change to OpSpec C059.

2. Audience. The primary audience for this notice is FAA CHDOs and POIs assigned to operators conducting airplane operations under parts 91, 91K, 121, 125, 125M, and 135. 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 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 C059 authorizes and lists the requirements and limitations for CAT II approach and landing operations. The following changes have been made:

- The entire paragraph has been rearranged and edited for clarity.
- The midpoint RVR report (if available) and the rollout RVR report are now required and controlling. The lowest allowable midpoint RVR is 600 RVR and the lowest rollout RVR is 300 RVR. These requirements are shown in a new Table 2.
- The requirement that fifteen percent additional runway length is available over the landing field length specified for destination airport is deleted from the part 121, 121/135 and 135 authorizations.

Note: The runway length requirement change to OpSpec C059 has been made in concert with changes to OpSpec C054 for parts 121 and 135. Runway length requirements given in OpSpec C054 have been expanded and clarified. This removes the need to repeat the same requirements in OpSpec C059 for parts 121 and 135.

5. Guidance. The Flight Technologies and Procedures Division (AFS-400), in cooperation with the Air Transportation Division (AFS-200), the General Aviation and Commercial Division (AFS-800), the International Programs and Policy Division (AFS-50), and industry members of the Operations Specifications Working Group (OSWG), developed this notice. This notice contains the following:

- The sample OpSpec C059 template in Appendix A applies to part 121.
- The sample OpSpec C059 template in Appendix B applies to part 135.
- The sample OpSpec C059 template in Appendix C applies to part 121/135.
- The sample LOA C059 template in Appendix D applies to part 91.
- The sample MSpec MC059 template in Appendix E applies to part 91K.
- The sample OpSpec C059 template in Appendix F applies to part 125.
- The sample LOA C059 template in Appendix G applies to part 125 (LODA A125).
- The sample OpSpec C059 template in Appendix H applies to part 129.

6. Action. POIs should review the revised guidance for issuance of OpSpec C059 for all operators and OpSpec C054 for part 121 and 135 operators. These part 121, 121/135 and 135 authorizations should be issued simultaneously to ensure that runway length requirements are met at all times. POIs should provide this notice to all operators for whom they are responsible, alerting them to updated operating procedures, as well as required pilot knowledge and training. This authorization is mandatory, with a compliance date of 90 days from the date of this notice.

7. Disposition. We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Flight Operations Branch (AFS-410) at 202-385-4621.

for 

John M. Allen
Director, Flight Standards Service

Appendix A. Sample OpSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 121

a. Authorization. The certificate holder is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed below in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

c. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved Airplane Flight Manual for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down, it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

d. Required RVR Reports. The certificate holder is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d(4).

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report.

Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

e. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

(1) A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the certificate holder's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the certificate holder's check pilots properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the PIC must meet the requirements of 14 CFR part 121, § 121.652.

f. Authorized CAT II Approaches, Airports, and Runways. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The certificate holder is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(a) Required runway lights: HIRL, TDZ lighting, and CL lighting (or foreign equivalent lighting at airports in Table 4).

(b) Required approach lights: ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The certificate holder is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down." The required runway and approach lights are the same as for standard CAT II approaches.

(3) Special Authorization (SA) CAT II. The certificate holder is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lighting become inoperative on a standard CAT II instrument approach, the certificate holder is authorized to conduct operations under this Special Authorization CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

g. Approach Requirements. The certificate holder shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RA NA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

h. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

i. Foreign Airports. The certificate holder is authorized to conduct Standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Table 1 in accordance with its approved lower landing minimums continuous maintenance program.

Appendix B. Sample OpSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 135

a. Authorization. The certificate holder is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

c. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

d. Required RVR Reports. The certificate holder is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d (4) below.

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report. Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

e. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

(1) A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the certificate holder's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the certificate holder's check pilots properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the PIC must meet the requirements of 14 CFR Section 135.225(e).

f. Authorized CAT II Approaches, Airports, and Runways. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The certificate holder is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(a) Required runway lights: HIRL, TDZ lighting, and CL lighting (or foreign equivalent lighting at airports in Table 4).

(b) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and Rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The certificate holder is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down." Required runway and approach lights are the same as for Standard CAT II approaches.

(3) Special Authorization (SA) CAT II. The certificate holder is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of A/L or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and Rollout RVR available: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lighting become inoperative on a standard CAT II instrument approach, the certificate holder is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

g. Approach Requirements. The certificate holder shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RANA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

h. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

i. The certificate holder is authorized to conduct Standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Table 1 in accordance with its approved lower landing minimums continuous maintenance program.

Appendix C. Sample OpSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 121/135

a. Authorization. The certificate holder is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

c. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

d. Required RVR Reports. The certificate holder is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d(4).

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report.

Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

e. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

(1) A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the certificate holder's approved CAT II training program and been certified as being qualified for CAT II operations by one of the certificate holder's check pilots properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the PIC must meet the requirements of 14 CFR part 121, § 121.652 or part 135, § 135.225(e), as applicable.

f. Authorized CAT II Approaches, Airports, and Runways. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The certificate holder is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)".

(a) Required runway lights: HIRL, TDZ lighting, and CL lighting (or foreign equivalent lighting at airports in table 4).

(b) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The certificate holder is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down." Required runway and approach lights are the same as for standard CAT II approaches.

(3) Special Authorization (SA) CAT II. The certificate holder is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These Part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1or ALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lights become inoperative on a standard CAT II instrument approach, the certificate holder is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

g. Approach Requirements. The certificate holder shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RA NA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

h. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

i. The certificate holder is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct 14 CFR Part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Table 1 in accordance with its approved lower landing minimums continuous maintenance program.

Appendix D. Sample LOA Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 91

Letter of Authorization
Category II Instrument Approach and Landing Operations

1. The operator is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this LOA.

2. Authorized CAT II Approach and Landing Minimums. The operator is authorized to conduct CAT II approaches using minima which is the highest of:

a. The lowest authorized for the published CAT II IAP,

b. Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

c. Those prescribed for the type of approach conducted, as listed in subparagraph 6, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

3. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable Section of the 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

4. Required RVR Reports. The operator is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

a. The TDZ RVR report is required and controlling for all CAT II operations.

b. Mid RVR reports, if available, are controlling.

c. The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph 4(d).

d. A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory. Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

5. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this LOA unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

a. A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the operator's approved CAT II training program, and has been certified as being qualified for CAT II operations.

b. Flightcrew training is conducted by TEXT 01 in accordance with 14 CFR part 91, § 91.3, § 91.703(a)(1) and (a)(2), and ICAO Annex 2, Rules of the Air, paragraph 2.3.2 crews are responsible for policies and procedures in areas of operations where flights are conducted.

6. Authorized CAT II Approaches, Airports, and Runways. The operator is authorized to conduct the following types of CAT II approaches:

a. Standard CAT II Approach. The operator is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(1) Required runway lights: HIRL, TDZ lighting, and CL lighting (or foreign equivalent lighting at airports in Table 4).

(2) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(3) If only TDZ RVR is available: 1600 RVR minimum.

(4) If TDZ and Rollout RVR available: TDZ 1200 RVR minimum.

b. CAT II to TDZ 1000 RVR. The operator is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down." The required runway and approach lights are the same as for Standard CAT II approaches.

c. Special Authorization (SA) CAT II. The operator is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(1) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(2) Required runway lights: HIRL.

(3) Required approach lights: SSALR, MALSR, or ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(4) If only TDZ RVR is available: 1600 RVR minimum.

(5) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(6) When TDZ and/or CL lights become inoperative on a standard CAT II instrument approach, the operator is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

7. Approach Requirements. The operator shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

a. The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

b. The required components of the CAT II ground system are installed and in normal operation including:

(1) Outer marker or DME facility used to define the FAF.

Note: A published waypoint or minimum glide slope intercept altitude (GSIA) fix may be used in lieu of an outer marker or DME fix.

(2) For CAT II RANA, an inner marker to identify the DH.

c. The crosswind component on the landing runway is less than the AFM's crosswind limitations, or 15 knots or less, whichever is more restrictive.

d. The effective runway length available at the destination airport is at least 115 percent of the runway length required for a dry runway.

8. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

a. After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

b. After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

c. Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

9. Foreign Airports. The operator is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
ComboBox	Text Box

10. CAT II Runway Restrictions. The operator is authorized to conduct part 97 CAT II IAPs using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**
ComboBox	Text Box

11. Airplane Maintenance. The operator must maintain the airplanes and equipment listed in Table 1 of this paragraph in accordance with its approved lower landing minimums continuous maintenance program.

12. 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 of the responsible person signing the LOA in Table 6.

Table 6

Name	E-mail Address	Telephone Number
[LOAD Operator Data]	Text Box	Text Box

Appendix E. Sample MSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 91K

a. Authorization. The program manager is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorized CAT II Approach and Landing Minimums. The program manager is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

c. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

d. Required RVR Reports. The program manager is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d(4).

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report.

Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

e. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

(1) A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the program manager's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the program manager's check pilots properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the PIC must meet the requirements of 14 CFR part 91, § 91.1039(c).

f. Authorized CAT II Approaches, Airports, and Runways. The program manager is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The program manager is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)".

(a) Required runway lights: HIRL, TDZ, and CL (or foreign equivalent lighting at airports in Table 4).

(b) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The program manager is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific OpSpec, MSpec, or LOA approval and use of A/L or HUD to touch down." The required runway and approach lights are the same as for standard CAT II approaches.

(3) Special Authorization (SA) CAT II. The program manager is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lights become inoperative on a standard CAT II instrument approach, the program manager is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

g. Approach Requirements. The program manager shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RANA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

(4) Fifteen percent additional runway length is available over the landing field length specified for destination airport in § 91.1037(b).

h. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

i. Foreign Airports. The program manager is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

j. CAT II Runway Restrictions. The program manager is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The program manager must maintain the airplanes and equipment listed in Table 1 in accordance with its approved lower landing minimums continuous maintenance program.

Appendix F. Sample OpSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 125

a. Authorization. The certificate holder is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

c. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

d. Required RVR Reports. The certificate holder is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d(4).

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report.

Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

e. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

(1) A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the certificate holder's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the certificate holder's check pilots properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the PIC must meet the requirements of 14 CFR part 125, § 125.379.

f. Authorized CAT II Approaches, Airports, and Runways. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The certificate holder is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(a) Required runway lights: HIRL, TDZ lighting, and CL lights (or foreign equivalent lighting at airports in Table 4).

(b) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The certificate holder is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down." The required runway and approach lights are the same as for Standard CAT II approaches.

(3) Special Authorization CAT II. The certificate holder is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF -1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These Part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lights become inoperative on a Standard CAT II instrument approach, the certificate holder is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

g. Approach Requirements. The certificate holder shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RANA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

(4) The destination runway length shall be determined prior to takeoff to be at least 115 percent of the runway field length required by the airplane AFM.

h. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

i. Foreign Airports. The certificate holder is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Table 1 of this paragraph in accordance with its approved lower landing minimums continuous maintenance program.

Appendix G. Sample LOA Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 125 (LODA A125)

Letter of Authorization
Category II Instrument Approach and Landing Operations

1. Authorization. The operator/company is authorized to conduct CAT II instrument approach and landing operations in accordance with the Letter of Deviation Authority (LODA) A125 using the limitations, provisions, procedures, and minimums specified in this paragraph.

2. Authorized CAT II Approach and Landing Minimums. The operator/company is authorized to conduct CAT II approaches using minima which is the highest of:

a. The lowest authorized for the published CAT II IAP,

b. Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

c. Those prescribed for the type of approach conducted, as listed in subparagraph 6, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

3. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the FAA-approved AFM for the conduct of CAT II operations must be installed and operational. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

4. Required RVR Reports. The operator/company is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

a. The TDZ RVR report is required and controlling for all CAT II operations.

b. Mid RVR reports, if available, are controlling.

c. The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph 4(d).

d. A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report. Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

5. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. The following shall apply:

a. A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the operator/company's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the operator/company's check pilots properly qualified for CAT II operations, or an FAA inspector.

b. Before conducting CAT II operations the PIC must meet the requirements of 14 CFR part 125, § 125.379.

6. Authorized CAT II Approaches, Airports, and Runways. The operator/company is authorized to conduct the following types of CAT II approaches:

a. Standard CAT II Approach. The operator/company is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(1) Required runway lights: HIRL, TDZ, and CL (or foreign equivalent lighting at airports in Table 4).

(2) Required approach lights: Approach Lighting System with Sequenced Flashing Lights (ALSF) 1 or 2. Sequenced flashing lights may be inoperative.

(3) If only TDZ RVR is available: 1600 RVR minimum.

(4) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

b. CAT II to TDZ 1000 RVR. The operator/company is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific OpSpec, MSpec, or LOA approval and use of A/L or HUD to touch down." The required runway and approach lights are the same as for standard CAT II approaches.

c. Special Authorization (SA) CAT II. The operator/company is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(1) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(2) Required runway lights: HIRL.

(3) Required approach lights: SSALR, MALSR, or ALSF- or ALSF-2. Sequenced flashing lights may be inoperative.

(4) If only TDZ RVR is available: 1600 RVR minimum.

(5) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(6) When TDZ and/or CL lights become inoperative on a standard CAT II instrument approach, the operator/company is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

7. Approach Requirements. The operator/company shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(a) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(b) The required components of the CAT II ground system are installed and in normal operation including:

(1) a precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(2) for CAT II RANA, an inner marker to identify the DH.

(c) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

(d) The destination runway length shall be determined prior to takeoff to be at least 115 percent of the runway field length required by the airplane AFM.

8. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(a) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(b) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(c) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

9. Foreign Airports. The operator/company is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 4.

Table 4

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations and Provisions**
ComboBox	Text Box

10. CAT II Runway Restrictions. The operator/company is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 5.

Table 5

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

11. Airplane Maintenance. The operator/company must maintain the airplanes and equipment listed in Table 1 of this paragraph in accordance with its approved lower landing minimums continuous maintenance program.

Appendix H. Sample OpSpec Paragraph C059, CAT II Instrument Approach and Landing Operations: 14 CFR Part 129

a. Authorization. The foreign air carrier is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this paragraph.

b. Authorization by the State of the Operator. The foreign air carrier is approved by the State of the Operator to conduct CAT II instrument approach and landing operations, and a copy of that approval including the approved approach minimums shall be provided to the FAA.

c. Authorized CAT II Approach and Landing Minimums. The foreign air carrier is authorized to conduct CAT II approaches using minima which is the highest of:

(1) The lowest authorized for the published CAT II IAP,

(2) Those prescribed for the specific M/M/S of airplane as listed in Table 1, or

(3) Those prescribed for the type of approach conducted, as listed below in subparagraph f, considering all operational limitations in this paragraph.

Table 1

Airplane M/M/S	Approach/Landing System	DH	TDZ RVR	Special Operational Equipment and Limitations

d. Required CAT II Airborne Equipment. The flight instruments, radio navigation equipment, and other airborne systems required by the applicable section of 14 CFR and the approved AFM for the conduct of CAT II operations must be installed and operational. Any additional airborne equipment required by the State of the Operator/State of Registry for the kinds of CAT II operations authorized must be operational and listed in Table 1. For approach minima requiring autoland (A/L) or manual (HUD) to touch down, the airplane and its automatic flight control guidance system (A/L) or manually flown (HUD) guidance system must be approved for approach and landing operations. When utilizing a HUD to touch down it must be flown in the AIII Approach mode of operation. Any additional airborne equipment that is required must be operational and listed in Table 1.

e. Required RVR Reports. The foreign air carrier is authorized to conduct CAT II operations to minima as low as those shown in Table 2 with the type of approach or landing systems and minima authorized in Table 1. Only RVR reports for the runway of intended landing may be used.

Table 2

Type of Operation	TDZ RVR	Mid RVR	Rollout RVR
Standard CAT II	1600 (500 m)	NR	NR
Standard CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)
CAT II to 1000 RVR	1000 (300 m)	600 (175 m) #	300 (75 m)
Special Authorization CAT II	1200 (350 m)	600 (175 m) #	300 (75 m)

Note: NR = Not Required; # = If available.

(1) The TDZ RVR report is required and controlling for all CAT II operations.

(2) Mid RVR reports, if available, are controlling.

(3) The rollout RVR report is required and controlling for all CAT II operations below 1600 RVR, except as specified in subparagraph d(4).

(4) A mid or far end RVR sensor report, if available, may be substituted for a rollout RVR report if the rollout sensor RVR report is not available. Far end RVR reports are advisory unless substituted for the rollout RVR report. Mid field reports substituted for unavailable rollout reports must report 600 RVR or greater; far end reports substituted for unavailable rollout reports must report 300 RVR or greater.

f. Flightcrew Qualifications. The flightcrew shall not conduct any operations authorized by this paragraph unless they are trained and qualified in the equipment and special procedures to be used. A PIC shall not conduct CAT II operations in any airplane until that pilot has successfully completed the foreign air carrier's approved CAT II training program, and has been certified as being qualified for CAT II operations by one of the foreign air carrier's check pilot properly qualified for CAT II operations, or a Civil Aviation Authority (CAA) inspector from the State of the Operator.

g. Authorized CAT II Approaches, Airports, and Runways. The foreign air carrier is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II Approach. The foreign air carrier is authorized to conduct CAT II approaches to airports and runways approved for 14 CFR part 97 CAT II operations, subject to the following restrictions. The approaches will be identified as "ILS RWY XX (CAT II)."

(a) Required runway lights: HIRL, TDZ, and CL.

(b) Required approach lights: ALSF-1 or ALSF-2. Sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1600 RVR minimum.

(d) If TDZ and rollout RVR available: TDZ 1200 RVR minimum.

(2) CAT II to TDZ 1000 RVR. The foreign air carrier is authorized to conduct CAT II operations to TDZ 1000 RVR, subject to the following restrictions. The approaches will be identified as standard CAT II approaches with an additional chart note saying "RVR 1000 authorized with specific operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA) approval and use of A/L or HUD to touch down."The required runway and approach lights are the same as for standard CAT II approaches.

(3) Special Authorization (SA) CAT II. The foreign air carrier is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example, TDZ lighting, runway CL lighting, or an ALSF-1 or ALSF-2 approach lighting system. These procedures have been specifically approved in accordance with Order 8400.13, and CAT II operations are authorized to be conducted as listed below:

(a) These part 97 CAT II approaches will be identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touch down."

(b) Required runway lights: HIRL.

(c) Required approach lights: SSALR, MALSR, or ALSF-1 orALSF-2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1600 RVR minimum.

(e) If TDZ and rollout RVR a vailable: TDZ 1200 RVR minimum.

(f) When TDZ and/or CL lights become inoperative on a standard CAT II instrument approach, the foreign air carrier is authorized to conduct operations under this SA CAT II subparagraph. All requirements listed in this subparagraph (other than procedure identification) must be met.

h. Approach Requirements. The foreign air carrier shall not begin the final approach segment of a CAT II IAP unless all of the following conditions are met:

(1) The approach and landing systems required for specific CAT II operations are shown in Table 3.

Table 3

Type of Operation	Equipment Required
Standard CAT II	Autopilot to DH or HUD to DH or Autoland
CAT II to 1000 RVR	HUD to Touch down or Autoland
SA CAT II	HUD to Touch down or Autoland

(2) The required components of the CAT II ground system are installed and in normal operation including:

(a) A precision or airport surveillance radar, or a compass locator transmitter or DME to identify the outer marker position.

(b) For CAT II RANA, an inner marker to identify the DH.

(3) The crosswind component on the landing runway is less than the AFM crosswind limitations, or 15 knots or less, whichever is more restrictive.

(4) Fifteen percent additional runway length is available over the landing field length specified for destination airport in the foreign air carrier's State of the Operator-approved Aircraft Operating Manual.

i. Missed Approach Requirements. A missed approach shall be initiated when any of the following conditions exist unless visual reference to the runway has been established:

(1) After passing the FAF, the primary approach guidance system in use (autopilot or manual (HUD)) becomes inoperative or is disengaged.

(2) After passing the FAF, any other airborne equipment required for the particular CAT II operation being conducted becomes inoperative.

(3) Before arriving at DH, any of the required elements of the CAT II ground system becomes inoperative.

j. CAT II Runway Restrictions. The foreign air carrier is authorized to conduct part 97 CAT II IAP using A/L or manual (HUD) to touch down into the restricted U.S facilities listed in Table 4.

Table 4

Runway and Airplane Restrictions and Limiting Conditions for 14 CFR Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions and Limitations**
ComboBox	Text Box

k. Airplane Maintenance. The foreign air carrier must maintain the airplanes and equipment listed in Table 1 of this paragraph in accordance with its approved lower landing minimums continuous maintenance program approved by the State of the Operator.