NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.70

National Policy

Effective Date:
04/13/09

Cancellation Date:
04/13/10

SUBJ: Operations Specification/Management Specification/Letter of Authorization 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 (91K), 121, 125 (including the Letter of Deviation Authority (LODA A125) operators), 129, and 135. This notice amends and clarifies the authorization (C059) for Category (CAT) II instrument approach and landing operations, and incorporates authorization C359, which authorizes CAT II instrument approach and landing operations in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, current edition. This notice deletes all C359 templates, and amends all C059 templates (e.g., operations specification (OpSpec) C059, management specification (MSpec) C059, and letter of authorization (LOA) C059) for operators conducting airplane operations under parts 91, 91K, 121, 125 (including LODA A125) operators), 129, and 135. This is a mandatory change to C059.

2. Audience. The primary audience for this notice is FAA CHDOs and POIs assigned to operators conducting airplane operations under the previously referenced 14 CFR parts. The secondary audience includes Flight Standards divisions and branches 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. Background. FAA Order 8400.13 authorizes special CAT II operations to approved runways that may not have certain standard CAT II equipment, such as dual localizer and glide-slope transmitters, centerline (CL) lighting, touchdown zone (TDZ) lighting, and Approach Lighting With Sequenced Flashing Lights (ALSF) 2. Ground equipment with certain performance inadequacies that may have previously prevented certain airborne operations may now be used for CAT II operations when the aircraft and avionics capabilities, crew training, and other factors mitigate ground equipment performance deficits. The current authorization C359 allows operators to conduct CAT II instrument approaches to approved runways if the operations are

conducted with the use of either a head-up display (HUD) or autoland to touchdown. The HUD and/or autoland system must be certificated to touchdown.

5. Guidance. The Flight Technologies and Procedures Division, AFS-400, in cooperation with the Air Transportation Division, AFS-200, the 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 C059 template in Appendix A applies to part 121.
- The sample OpSpec C059 template in Appendix B applies to part 125.
- The sample OpSpec C059 template in Appendix C applies to part 135.
- The sample MSpec MC059 template in Appendix D applies to part 91K.
- The sample LOA C059 template in Appendix E applies to part 125 subpart M.
- The sample LOA C059 template in Appendix F applies to part 91.
- The sample OpSpec C059 template in Appendix G applies to part 129.

  Note: Inspector guidance will be incorporated into Order 8900.1, Flight Standards Information Systems (FSIMS), Volume 3, Chapter 18, Section 5, Part C Operations Specifications—Airplane Terminal Instrument Procedures and Airport Authorizations and Limitations.

6. Action. POIs must review the revised guidance for issuance of the paragraph contained in this notice. POIs should provide this notice to the 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 permanently incorporate this information in FSIMS before this notice expires. Direct your questions or comments concerning this notice to the Flight Operations Branch, AFS-410, at (202) 385-4625.

ORIGINAL SIGNED by
John W. McGraw for

John M. Allen
Director, Flight Standards Service

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Appendix A. Sample OpSpec Paragraph C059, Category 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. Approved Airplanes. The certificate holder is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this paragraph are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

d. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Tables 1 and 2 of this paragraph in accordance with its approved Lower Landing Minimums continuous maintenance program. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9 provides continuing airworthiness/maintenance criteria, which may be used as one means, but not the only means, appropriate to satisfy maintenance program requirements.

e. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this paragraph unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

(1) A PIC must 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 airmen 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 § 121.652.

f. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

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

(2) Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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

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g. Authorized CAT II Approaches, Airports, and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10 provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown it must be flown in the A III Approach mode of operation. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(a) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

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

(c) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(d) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(e) The certificate holder is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(f) If TDZ and rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(g) When TDZ and/or CL lights become inoperative on a CAT II instrument approach, the certificate holder is authorized to use the minimums listed under the heading *Reduced Lighting CAT II* below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

(2) Reduced Lighting 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 International Civil Aviation Organization (ICAO) standard; for example, TDZ lighting, runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS and CAT II operations are authorized to be conducted as listed below.

(a) These part 97 CAT II approaches will be identified by an additional chart note saying, "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(b) Required runway lights: HIRL

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(c) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR), or ALSF-1/2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(e) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

h. Approach Requirements. The certificate holder must not begin the final approach segment of a CAT II instrument approach procedure unless all of the following conditions are met:

(1) The airborne equipment required by this paragraph is installed and operating satisfactorily.

(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 distance measuring equipment to identify the outer marker position.

(b) For CAT II "RA NA" (radar/radio altimeter not authorized) an inner marker to identify the DH.

(3) The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR, if the rollout sensor RVR report is not available.

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

(5) Fifteen percent additional runway length is available over the landing field length specified for destination airport in 14 CFR § 121.195(b).

i. Missed-Approach Requirements. A missed approach will 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.

(4) The crosswind component at touchdown is expected to be greater than 15 knots, or greater than the AFM's crosswind limitations, whichever is more restrictive.

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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Appendix B. Sample OpSpec Paragraph C059, Category 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. Approved Airplanes. The certificate holder is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this paragraph are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

d. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Tables 1 and 2 of this paragraph in accordance with its approved Lower Landing Minimums continuous maintenance program. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9, provides continuing airworthiness/maintenance criteria which may be used as one means, but not the only means appropriate to satisfy maintenance program requirements.

e. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this paragraph unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

(1) A PIC must 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 airmen 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 § 125.379.

f. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

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

(2) Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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

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g. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10, provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown it must be flown in the A III Approach mode of operation. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(a) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(b) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(d) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(e) The certificate holder is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(f) If TDZ and rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(g) When TDZ and/or CL become inoperative on a CAT II instrument approach, the certificate holder is authorized to use the minimums listed under the heading *Reduced Lighting CAT II*, below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

(2) Reduced Lighting CAT II. The certificate holder is authorized to conduct CAT II instrument approach procedures on certain ILS facilities that do not meet the equipment requirements of a U.S. standard or International Civil Aviation Organization (ICAO) standard, for example, TDZ lighting, runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, and CAT II operations are authorized to be conducted as listed below.

(a) These part 97 CAT II approaches will be identified by an additional chart note saying, "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(b) Required runway lights: HIRL.

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(c) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF-1/2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(e) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

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

(1) The airborne equipment required by this paragraph is installed and operating satisfactorily.

(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 distance measuring equipment to identify the outer marker position.

(b) For CAT II "RA NA" (radar/radio altimeter not authorized) an inner marker to identify the DH.

(3) The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR if the rollout sensor RVR report is not available.

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

(5) Fifteen percent additional runway length is available over the landing field length specified for destination airport in 14 CFR § 121.195(b).

i. Missed-Approach Requirements. A missed approach will 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.

(4) The crosswind component at touchdown is expected to be greater than 15 knots, or greater than the AFM's crosswind limitations, whichever is more restrictive.

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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Appendix C. Sample OpSpec Paragraph C059, Category 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. Approved Airplanes. The certificate holder is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this paragraph are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

d. Airplane Maintenance. The certificate holder must maintain the airplanes and equipment listed in Tables 1 and 2 of this paragraph in accordance with its approved Lower Landing Minimums continuous maintenance program. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9, provides continuing airworthiness/maintenance criteria, which may be used as one means, but not the only means, appropriate to satisfy maintenance program requirements.

e. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this paragraph unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

(1) A PIC must 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 airmen properly qualified for CAT II operations, or an FAA inspector.

(2) Before conducting CAT II operations the pilot in command must meet the requirements of 14 CFR § 135.225.

f. Authorized CAT II Approach and Landing Minimums. The certificate holder is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

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

(2) Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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

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g. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10, provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown, it must be flown in the A III Approach mode of operation. The certificate holder is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II. 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 with a notation in the chart minimums section saying "Category II ILS – Special Aircrew & Aircraft Certification Required."

(a) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(b) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(d) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(e) The certificate holder is authorized to conduct Standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(f) If TDZ and rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(g) When TDZ and/or CL lights become inoperative on a CAT II instrument approach, the certificate holder is authorized to use the minimums listed under the heading *Reduced Lighting CAT II*, below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

(2) Reduced-Lighting CAT II. The certificate holder is authorized to conduct CAT II instrument approach procedures on certain ILS facilities that do not meet the equipment requirements of a U.S. standard or International Civil Aviation Organization (ICAO) standard, for example, TDZ lighting, runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, and CAT II operations are authorized to be conducted as listed below.

(a) These part 97 CAT II approaches will be identified by an additional chart note saying "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(b) Required runway lights: HIRL

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(c) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF-1/2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(e) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

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

(1) The airborne equipment required by this paragraph is installed and operating satisfactorily.

(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 distance measuring equipment to identify the outer marker position.

(b) For CAT II "RA NA" (radar/radio altimeter not authorized) an inner marker to identify the DH.

(1) The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR if the rollout sensor RVR report is not available.

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

(3) Fifteen percent additional runway length is available over the landing field length specified for destination airport in 14 CFR § 135.385(b).

i. Missed-Approach Requirements. A missed approach will 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.

(4) The crosswind component at touchdown is expected to be greater than 15 knots, or greater than the AFM's crosswind limitations, whichever is more restrictive.

j. CAT II Runway Restrictions. The certificate holder is authorized to conduct part 97 CAT II IAP using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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Appendix D. Sample MSpec Paragraph MC059, Category II Instrument Approach and Landing Operations: 14 CFR Part 91 Subpart K

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. Approved Airplanes. The program manager is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this paragraph are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

d. Airplane Maintenance. The program manager must maintain the airplanes and equipment listed in Tables 1 and 2 of this paragraph in accordance with its approved Lower Landing Minimums continuous maintenance program. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9, provides continuing airworthiness/maintenance criteria, which may be used as one means, but not the only means, appropriate to satisfy maintenance program requirements.

e. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this paragraph unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

(1) A PIC must 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 pilot in command must meet the requirements of 14 CFR § 91.1039(c).

f. Authorized CAT II Approach and Landing Minimums. The program manager is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

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

(2) Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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

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g. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10 provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown, it must be flown in the A III Approach mode of operation. The program manager is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(a) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(b) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(d) If TDZ and Rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(e) The program manager is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(f) If TDZ and rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(g) When TDZ and/or CL lights become inoperative on a CAT II instrument approach, the program manager is authorized to use the minimums listed under the heading *Reduced Lighting CAT II* below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

(2) Reduced Lighting 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 International Civil Aviation Organization (ICAO) standard, for example, TDZ lighting, runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II performance classification standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, and CAT II operations are authorized to be conducted as listed below.

(a) These part 97 CAT II approaches will be identified by an additional chart note saying, "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(b) Required runway lights: HIRL

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(c) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF-1/2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(e) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

h. Approach Requirements. The program manager will not begin the final approach segment of a CAT II instrument approach procedure unless all of the following conditions are met:

(1) The airborne equipment required by this paragraph is installed and operating satisfactorily.

(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 distance measuring equipment to identify the outer marker position.

(b) For CAT II “RA NA” (radar/radio altimeter not authorized) an inner marker to identify the DH.

(3) The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR, if the rollout sensor RVR report is not available.

(4) The crosswind component on the landing runway is less than the AFM’s demonstrated crosswind component, or 15 knots or less, whichever is more restrictive.

(5) Fifteen percent additional runway length is available over the landing field length specified for destination airport in 14 CFR § 91.1037(b).

i. Missed-Approach Requirements. A missed approach will 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.

(4) The crosswind component at touchdown is expected to be greater than 15 knots, or greater than the AFM’s demonstrated crosswind component, whichever is more restrictive.

j. CAT II Runway Restrictions. The program manager is authorized to conduct part 97 CAT II IAP using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

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Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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Appendix E. Sample LOA C059, Category II Instrument Approach and Landing Operations: 14 CFR Part 125M

Letter of Authorization
Category II Instrument Approach and Landing Operations

1. Authorization. The operator/company authorized to conduct operations in accordance with the Letter of Deviation Authority 125, is authorized to conduct CAT II instrument approach and landing operations using the limitations, provisions, procedures, and minimums specified in this letter of authorization.

2. Approved Airplanes. The operator/company is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this letter of authorization are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

4. Airplane Maintenance. The operator/company must maintain the airplanes and equipment listed in Tables 1 and 2 of this letter of authorization in accordance with its approved Lower Landing Minimums continuous maintenance program. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9, provides continuing airworthiness/maintenance criteria, which may be used as one means, but not the only means, appropriate to satisfy maintenance program requirements.

5. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this letter of authorization unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

a. A PIC must 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 airmen properly qualified for CAT II operations, or an FAA inspector.

b. Before conducting CAT II operations the pilot in command must meet the requirements of 14 CFR § 125.379.

6. Authorized CAT II Approach and Landing Minimums. The operator/company is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

a. The lowest authorized for the published CAT II instrument approach procedure, and

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b. Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

c. Those prescribed for the type of approach conducted as listed below, considering all operational limitations in this letter of authorization.

7. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10 provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown it must be flown in the A III Approach mode of operation. The operator/company is authorized to conduct the following types of CAT II approaches:

a. Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(1) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(2) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(3) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(4) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(5) The operator/company is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(6) If TDZ and Rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(7) When TDZ and/or CL lights become inoperative on a CAT II instrument approach, the operator/company is authorized to use the minimums listed under the heading *Reduced Lighting CAT II* below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

b. Reduced Lighting 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 International Civil Aviation Organization standard, for example, TDZ lighting, runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, and CAT II operations are authorized to be conducted as listed below.

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(1) These part 97 CAT II approaches will be identified by an additional chart note saying "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(2) Required runway lights: HIRL

(3) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF-1/2. Sequenced flashing lights may be inoperative.

(4) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(5) If TDZ and Rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

8. Approach Requirements. The operator/company must not begin the final approach segment of a CAT II instrument approach procedure unless all of the following conditions are met:

a. The airborne equipment required by this letter of authorization is installed and operating satisfactorily.

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 distance measuring equipment to identify the outer marker position.

(2) For CAT II "RA NA" (radar/radio altimeter not authorized) an inner marker to identify the DH.

c. The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR, if the rollout sensor RVR report is not available.

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

e. Fifteen percent additional runway length is available over the landing field length specified for destination airport in 14 CFR § 121.195(b).

9. Missed-Approach Requirements. A missed approach will 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.

d. The crosswind component at touchdown is expected to be greater than 15 knots, or greater than the AFM's crosswind limitations, whichever is more restrictive.

10. CAT II Runway Restrictions. The operator/company is authorized to conduct part 97 CAT II instrument approach procedures using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

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Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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Appendix F. Sample LOA C059, Category II Instrument Approach and Landing Operations: 14 CFR Part 91

Letter of Authorization
Category II Instrument Approach and Landing Operations

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

2. Approved Airplanes. The operator is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this letter of authorization are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not Less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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. Any additional airborne equipment that is required must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations and Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

4. Airplane Maintenance. The operator must maintain the airplanes and equipment listed in Tables 1 and 2 of this letter of authorization in accordance with its approved CAT II manual. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, paragraph 9, provides continuing airworthiness/maintenance criteria, which may be used as one means, but not the only means, appropriate to satisfy maintenance program requirements.

5. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this letter of authorization unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

a. A PIC must 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 _____. In accordance with 14 CFR §§ 91.3 and 91.703(a)(1)(2) and International Civil Aviation Organization (ICAO) Annex 2 (Rules of the Air), paragraph 2.3.2 (Pre-flight action), crews are responsible for policies and procedures in areas of operations where flights are conducted.

6. Authorized CAT II Approach and Landing Minimums. The operator is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

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

b. Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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c. Those prescribed for the type of approach conducted as listed below considering all operational limitations in this letter of authorization.

7. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system (autoland) or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10 provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown it must be flown in the A III Approach mode of operation. The operator is authorized to conduct the following types of CAT II approaches:

a. Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(1) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(2) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(3) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(4) If TDZ and Rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(5) The operator is authorized to conduct standard CAT II approaches to only those specifically approved runways at foreign airports listed in Table 3.

Table 3

Authorized Foreign Airports and Runways for CAT II Operations	
Airport Name/Identifier, and Runways	**Limitations & Provisions**
N/A	N/A

(6) If TDZ and rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(7) When TDZ and/or CL lights become inoperative on a CAT II instrument approach, the operator is authorized to use the minimums listed under the heading *Reduced Lighting CAT II*, below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*, above.

b. Reduced Lighting 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 lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. These procedures have been specifically approved in accordance with FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS, and CAT II operations are authorized to be conducted as listed below.

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(1) These part 97 CAT II approaches will be identified by an additional chart note saying, “Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.”

(2) Required runway lights: HIRL.

(3) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF-1/2. Sequenced flashing lights may be inoperative.

(4) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(5) If TDZ and Rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

8. Approach Requirements. The operator must not begin the final approach segment of a CAT II instrument approach procedure unless all of the following conditions are met:

a. The airborne equipment required by this letter of authorization is installed and operating satisfactorily.

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 distance measuring equipment to identify the outer marker position.

(2) For CAT II “RA NA” (radar/radio altimeter not authorized) an inner marker to identify the DH.

c. The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available may be substituted for a rollout RVR, if the rollout sensor RVR report is not available.

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

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

9. Missed-Approach Requirements. A missed approach will 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.

d. The crosswind component at touch down is expected to be greater than 15 knots, or greater than the AFM’s crosswind limitations, whichever is more restrictive.

10. CAT II Runway Restrictions. The operator is authorized to conduct part 97 CAT II IAP using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 4.

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Table 4

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**
TABL10	TABL11

11. 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 letter of authorization relinquishes responsibility, this letter of authorization becomes invalid.

b. Enter the name, e-mail address, and telephone number in Table 6 of the responsible person signing this letter of authorization.

Table 5 – Responsible Person

Name	Email Address	Telephone Number
TABL12	TABL13	TABL14

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Appendix G. Sample OpSpec Paragraph C059, Category 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 must be provided to the FAA.

c. Approved Airplanes. The foreign air carrier is authorized to use the airplanes listed in Table 1 in CAT II operations, provided all the applicable limitations and provisions of this paragraph are met.

Table 1

CAT II Approach and Landing Minimums		
Airplane M/M/S	**DH Not less Than**	**Lowest Authorized RVR**
TABL01	TABL02	TABL03

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 that is required in accordance with state of the operator/state of registry requirements; FAA Order 8400.13, Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS; and FAA AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, for the kinds of CAT II operations to be authorized, must be operational and listed in Table 2.

Table 2

Kind of CAT II Operation		
Airplane M/M/S	**Additional Equipment and/or Special Limitations And Provisions**	**Manual (HUD)/or Autopilot**
TABL04	TABL05	TABL06

e. Airplane Maintenance. The foreign air carrier must maintain the airplanes and equipment listed in Tables 1 and 2 of this paragraph in accordance with its approved Lower Landing Minimums continuous maintenance program approved by the state of the operator.

f. Flightcrew Qualifications. The flightcrew must not conduct any operations authorized by this paragraph unless it is trained and qualified in the equipment and special procedures to be used. The following applies:

(1) A PIC must 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 airmen properly qualified for CAT II operations or a civil aviation authority inspector from the state of the operator.

g. Authorized CAT II Approach and Landing Minimums. The foreign air carrier is authorized to conduct CAT II approaches using the most restrictive (highest) combination of DH and RVR from:

(1) The lowest authorized for the published CAT II instrument approach procedure, and

(2) Those prescribed for the specific make, model, and series of aircraft as listed in Table 1, and

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

h. Authorized CAT II Approaches, Airports and Runways. For approach minimums requiring autoland or manual HUD to touchdown, the airplane and its automatic flight control guidance system or manually flown (HUD) guidance system must be approved for approach and landing operations. AC 120-29, paragraph 10 provides operational approval criteria, which may be used as one means, but not the only means, appropriate to satisfy operational requirements. When using a HUD to touchdown it must be flown in the A III Approach mode of operation. The foreign air carrier is authorized to conduct the following types of CAT II approaches:

(1) Standard CAT II. 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 with a notation in the chart minimums section saying, "Category II ILS – Special Aircrew & Aircraft Certification Required."

(a) Required runway lights: High-Intensity Runway Light (HIRL), and TDZ, and centerline (CL) (or foreign equivalent).

(b) Required approach lights: Approach Lighting System With Sequenced Flashing Lights (ALSF)-1/2. sequenced flashing lights may be inoperative.

(c) If only TDZ RVR is available: 1,600 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(d) If TDZ and Rollout RVR available: 1,200 RVR minimum. Use of autopilot or manual (HUD) to DH is required.

(e) If TDZ and Rollout RVR available: 1,000 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

(f) When TDZ and/or CL become inoperative on a CAT II instrument approach, the foreign air carrier is authorized to use the minimums listed under the heading *Reduced Lighting CAT II* below. All requirements listed in that subparagraph must be met; however, the procedure only need be identified as described under the heading *Standard CAT II*.

(2) Reduced Lighting CAT II. The foreign air carrier is authorized to conduct CAT II instrument approach procedures on certain ILS facilities that do not meet the equipment requirements of a U.S. standard or International Civil Aviation Organization (ICAO) standard, for example, TDZ lighting , runway CL lighting, and an ALSF-1 or ALSF-2 approach lighting system. These facilities meet all requirements of the CAT II Performance Classification Standard, and also meet CAT III localizer requirements to touchdown. The absence of runway TDZ, CL, and ALSF-1/2 lighting systems is mitigated by the operator requirement to use autoland or manual (HUD) to touchdown. 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 by an additional chart note saying, "Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown."

(b) Required runway lights: HIRL.

(c) Required approach lights: Simplified short approach lighting system with runway alignment indicator lights (SSALR), or medium-intensity approach lighting system with runway alignment indicator lights (MALSR) or ALSF 1/2. Sequenced flashing lights may be inoperative.

(d) If only TDZ RVR is available: 1,600 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

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(e) If TDZ and rollout RVR available: 1,200 RVR minimum. Use of autoland or manual (HUD) to touchdown is required.

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

(1) The airborne equipment required by this paragraph is installed and operating satisfactorily.

(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 distance measuring equipment to identify the outer marker position.

(b) For CAT II "RA NA" (radar/radio altimeter not authorized) an inner marker to identify the DH.

(3) The RVR sensors required for the minimums for the approach being conducted are available and reporting. The TDZ sensor report is controlling for all CAT II operations. Additional RVR sensors are advisory. A mid-RVR sensor or a far-end sensor, if available, may be substituted for a rollout RVR if the rollout sensor RVR report is not available.

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

(5) 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.

j. Missed-Approach Requirements. A missed approach will 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.

(4) The crosswind component at touch down is expected to be greater than 15 knots, or greater than the AFM's crosswind limitations, whichever is more restrictive.

k. CAT II Runway Restrictions. The foreign air carrier is authorized to conduct part 97 CAT II instrument approach procedures using autoland or manual (HUD) to touchdown into the restricted U.S facilities listed in Table 3.

Table 3

Runway and Aircraft Restrictions and Limiting Conditions for Part 97 CAT II Operations	
Airport Name/Identifier, and Runways	**Restrictions & Limitations**

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