U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
National Policy

ORDER 8400.13D

Effective Date:
10/22/09

SUBJ: Procedures for the Evaluation and Approval of Facilities for Special Authorization Category I Operations and All Category II and III Operations

FOREWORD

This order provides guidance for all personnel in the authorization of instrument landing system (ILS) ground facilities to support Category I (CAT I) operations to Runway Visual Range (RVR) 1800 and Special Authorization CAT I to RVR 1400, and all Category II (CAT II) and Category III (CAT III) operations (including Special Authorization CAT II).

With a growing emphasis on performance-based operations, different levels of operation may be authorized based on the flight equipment of a specific operator, and the ground equipment available at specific runways. While certain ground facility requirements are needed to support all levels of either CAT I, CAT II, or CAT III operations, a higher category of operations may be performed on different "types" of ground equipment if the airborne equipment, crew training, or other factors offset any changes in ground facility requirements. In these situations, operations are predicated on the use of specific equipment and/or procedures, which will be required in the operator's applicable authorization (such as an operations specification (OpSpec), management specification (MSpec), or letter of authorization (LOA)).

ORIGINAL SIGNED by
/s/ John M. Allen
Director, Flight Standards Service

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Chapter 1. General Information

1. Purpose of This Order. This order lists the minimum requirements for evaluation and approval of ground facilities supporting Category I (CAT I) and Category II (CAT II) instrument landing system (ILS) approaches to runways which do not meet all performance or equipment requirements of a U.S. Standard or International Civil Aviation Organization (ICAO) Standard, and for all CAT II and category III (CAT III) ILS approaches. Specifically this order:

a. Lists the minimum requirements for CAT II and III ILS operations at various facilities. The Federal Aviation Administration (FAA) criteria for CAT II and III ILS operations meet ICAO CAT II and III standards;

b. Implements FAA policy regarding CAT I ILS approaches using a Runway Visual Range (RVR) minimum of 1800 feet and a decision height (DH) of 200 feet, and CAT I ILS approaches using a RVR minimum as low as 1400 feet and a radar altimeter (RA) DH as low as 150 feet height above threshold (HATh) at runways which do not have touchdown zone (TDZ) and/or runway centerline (RCL) lighting;

c. Implements requirements for CAT II ILS approval to runways which do not meet the equipment requirements of a U.S. Standard or ICAO Standard; and

d. Implements FAA policy regarding CAT II ILS approach operations with a RVR minimum of 1000 feet to runways which meet U.S. and ICAO standards for CAT II equipment, performance, and lighting.

2. Audience. The audience for this order is FAA personnel involved in the evaluation, implementation, and approval of minima for Special Authorization CAT I instrument approaches, and minima for all CAT II and III instrument approaches.

3. Where You Can Find This Order. Inspectors can access this order through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators and the public can find this order at http://fsims.faa.gov.

4. What This Order Cancels. This order cancels Order 8400.13C, Procedures for Category I Approach Operations at RVR 1800 and Approval of Special Authorization for Category II Approach Operations on Type I ILS, dated November 3, 2008; and Order 8400.8, Procedures for the Approval of Facilities for FAR Part 121 and Part 135 CAT III Operations, dated September 10, 1980.

5. Explanation of Changes. This revision incorporates and updates the requirements for the approval of ground facilities supporting standard CAT II and III operations. This revision introduces the requirements for Special Authorization CAT I operations to a RA DH as low as 150 feet and a visibility minimum as low as RVR 1400 to runways that do not have TDZ or RCL lighting when the approach is flown using a head-up display (HUD) to DH. This revision also introduces the requirements for CAT II operations to an RVR of 1000 to runways with standard CAT II equipment and lighting when using autoland or HUD to touchdown. The checklists contained in the appendices have been updated to cover all CAT II and III approvals and to clarify information. For a list of approved Special Authorization CAT II runways, CAT II and III

approaches at foreign airports, and CAT II and III approaches with special limitations approved by this order, see the FAA Web site at: http://www.faa.gov/about/office_org/ headquarters_offices/ avs/offices/afs/afs400/afs410/.

6. Background.

a. Historically, in the United States and internationally, ground navigation equipment was designated to correlate with a specific operation. For example, in ICAO Annex 10, Volume I, a Facility Performance CAT II ILS is associated with an operational performance CAT II procedure. The basic assumption of this correlation is that a certain level of performance by ground navigation equipment is necessary to support the corresponding airborne operation.

b. The term "type" is used in this order to differentiate the ground facility from the category of flight operation (i.e., Type II ILS facility as opposed to CAT II operations or CAT III instrument approach minimums). This distinction is intended to eliminate existing confusion between facility establishment criteria and operational criteria for approval of CAT I, CAT II, or CAT III flight operations. Typically, the "type" classification defines the ground equipment necessary to support precision approach and landing operations by aircraft and operators which meet the minimum airborne equipment requirements for that category of operations. While certain ground facility requirements are needed to support all levels of either CAT I, CAT II, or CAT III operations, a higher category of operations may be performed on different "types" of ground equipment if the airborne equipment, crew training, or other factors offset any changes in ground facility requirements. The higher performance capabilities of new and improved avionics have mitigated some of the performance requirements of the ground-based navigation equipment.

c. A Type I facility is defined as all localizer (LOC) and glideslope (GS) facilities not meeting the definition of Type II or Type III and which have a published straight-in course coincident with the centerline of the runway or an offset localizer which is not offset in excess of 3 degrees from the centerline of the runway.

d. A U.S. Type II facility meets or exceeds all requirements for an ICAO "facility performance CAT II ILS" as specified in Annex 10, Volume I, Chapter 3. U.S. Type II facilities are designated as such by Technical Operations, and meet all the requirements to support CAT II approach and landing operations.

e. A U.S. Type III facility meets or exceeds all ICAO criteria as specified in ICAO Annex 10, Volume I, Chapter 3, and is identified as "CAT III" in standards, recommended practices, or guidance material. A type III facility typically consists of a dual frequency localizer which meets all CAT III requirements to at least a point 3000 feet from the approach end of the runway, a glideslope which meets CAT III requirements to the threshold, executive integrity monitors which identify any degradation of signal integrity exceeding CAT III standards, a far field monitor to identify critical area incursions or signal variations in the far field which may affect signal integrity, backup transmitters, and backup power to ensure continuous power for critical systems. A type III facility typically includes ancillary equipment such as full runway edge, end, and in-pavement lighting (high intensity runway lights (HIRL), TDZ lights, and RCL lights), a full approach lighting system (ALSF-2), and power changeover requirements to ensure

continuous power for critical lighting systems. Type III facility requirements reflect the fact that CAT III operations are highly dependent on the accuracy, integrity, and reliability of ground equipment throughout approach, landing, and rollout.

Chapter 2. CAT I 1800 RVR Approach Operations

1. Scope. This order authorizes CAT I approaches with a DH of 200 feet and visibility minimums of RVR 1800 at runways with reduced lighting, using an aircraft flight director (FD) or autopilot (AP) with an approach coupler or head-up display (HUD) to DA.

2. Requirements.

a. To be eligible for CAT I approaches to RVR 1800, runways must have or be qualified for a Title 14 of the Code of Federal Regulations (14 CFR) part 97 Standard Instrument Approach Procedure (SIAP). If the ILS facility has restrictions, it must be approved by AFS-400 in coordination with the Flight Inspections Operations Group (AJW-33) on a case-by-case basis.

b. Runways must have or be qualified for CAT I DH of 200 feet or less and visibility minimum of not more than 2400 RVR.

c. The runway must have a declared landing distance of 5000 feet or greater.

d. Required lighting and ancillary equipment.

(1) A simplified short approach lighting system with runway alignment indicator lights (SSALR), medium intensity approach lighting system with runway alignment indicator lights (MALSR), or approach lighting with sequenced flashing lights (ALSF-1/ALSF-2),

(2) HIRL, and

(3) A TDZ sensor of an RVR reporting system.

e. Instrument Approach Procedure (IAP).

(1) The Threshold Crossing Height (TCH), Reference Datum Height (RDH), or Achieved Reference Datum Height (ARDH) must not exceed 60 feet.

(2) Any existing part 97 CAT I SIAP which did not qualify for 1800 RVR due to the absence of TDZ or RCL lighting can be amended to include 1800 RVR visibility. When the straight-in ILS minimum is approved for 1800 RVR, include the following in the notes section of FAA Form 8260-3, Instrument Approach Procedure FAR Part: “Chart Note: RVR 1800 Authorized with use of FD or AP or HUD to DA” referenced to the straight-in ILS minimum.

3. Operational Approval.

a. Completion of the checklists in Appendix C or D is not required.

b. When 1800 RVR operations are authorized it will be documented on the applicable FAA Form 8260-3. Individual SIAPs become available to approved operators by amending the part 97 CAT I SIAP. When approved, and prior to the part 97 CAT I SIAP being amended, a NOTAM will be issued which authorizes RVR 1800.

c. CAT I operations to RVR 1800 will be added to existing CAT I SIAPS in accordance with a schedule established by the Regional Airspace and Procedures Team (RAPT).

Chapter 3. Special Authorization CAT I Approach Operations

1. Scope. This order authorizes CAT I approaches with a DH as low as 150 feet (HATh using RA minima) and a visibility minimum as low as RVR 1400 at runways with reduced lighting, using a HUD to DH.

2. Air Traffic Control Tower (ATCT). Special Authorization (SA) CAT I operations require an operational ATCT to ensure separation of airborne and ground traffic in low visibility conditions, to ensure proper protection of the localizer and glideslope critical areas, and to accomplish the required monitoring of ground equipment.

3. Requirements.

a. To be eligible for Special Authorization CAT I approaches as low as RVR 1400 and 150 DH, runways must have or be qualified for a 14 CFR part 97 SIAP. If the ILS facility has restrictions, it must be approved by AFS-400 in coordination with AJW-33 on a case-by-case basis.

b. Runways must have or be qualified for CAT I DH of 200 feet and visibility minimum of not more than RVR 2400.

c. Single pilot operators are prohibited from using Special Authorization CAT I landing minimums.

d. The runway must have a declared landing distance of 5000 feet or greater.

e. Required lighting and ancillary equipment.

(1) A SSALR, MALSR, or ALSF-1/ALSF-2,

(2) HIRL, and

(3) A TDZ sensor of an RVR reporting system.

f. IAP.

(1) The commissioned glide path angle shall be 3.0 degrees. Angles other than 3.0 degrees require approval of FAA Flight Standards Service.

(2) The TCH, RDH, or ARDH must not exceed 60 feet.

(3) Obstacle Free Zones (OFZ) must meet the CAT I OFZ standards described in AC 150/5300-13, Airport Design (current edition).

(4) Obstructions must not penetrate the approach light plane in accordance with the current editions of Order 6850.2, Visual Guidance Light System, and AC 150/5340-30, Design and Installation Details for Airport Visual Aids.

(5) The glideslope clearance below path checks must be satisfactory to runway threshold.

(6) The missed approach segment must meet the current Terminal Instrument Procedures (TERPS) CAT II/III development standard until Order 8260.3, United States Standard For Terminal Instrument Procedures (current edition) is revised with new CAT I missed approach surfaces which accommodate Special Authorization CAT I. If the DH is increased to accommodate an obstacle in accordance with TERPS CAT II/III standards, the RVR must be increased in accordance with Table 3-1 below. If the DH using TERPS CAT II/III standards is increased by 50 feet or less to accommodate an obstacle, the SA CAT I DH need not be adjusted.

Table 3-1. Minimum Visibility Values

HATh Range	RVR
150-170	1400
171-185	1600

(7) When the straight-in ILS is approved with DH as low as 150 and a visibility minima as low as RVR 1400, enter a separate line of minima immediately below the standard minimums on the CAT I instrument approach plate. Separate them with the heading "SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED." The new line of minima shall be published as RA minima. Include the following in the notes section of Form 8260-3: "Chart Note: Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH" referenced to the new ILS minimum. If the ATCT does not provide continuous service, publish a note on the chart indicating the procedure is not authorized when the tower is closed.

4. Operational Approval.

a. Completion of all checklists in Appendix C and D is not required. AJW-33 submits a completed AVN ILS Category Checklist upon completion of the flight inspection, if applicable.

b. Airport sponsor involvement (letter of concurrence) is required and must be submitted through the appropriate Airport District Office (ADO) or Airport Regional Office, as applicable. This may include the willingness to remove obstacles, provide resources such as personnel and funding, and install additional equipment such as lights, markings, signage, etc.

c. When Special Authorization CAT I operations are authorized it will be documented on the applicable FAA Form 8260-3. When operators are approved to use the new minimum it will be authorized by the appropriate OpSpec/MSpec/LOA. Individual SIAPs become available to approved operators upon publication of the part 97 CAT I SIAP.

d. Only those operators authorized for CAT II operations using aircraft operationally approved for CAT II operations and equipped with an operable HUD which is approved for at least CAT II operations are eligible for this operation. The HUD must be operated in the mode used for CAT II or CAT III operations. The OpSpec, MSpec, or LOA must include the limitation requiring the use of HUD to DH, and the limitation prohibiting single pilot operators from using Special Authorization CAT I visibility minimums.

Chapter 4. Standard CAT II Approach Operations

1. Scope. CAT II approaches with a DH as low as 100 feet and visibility minima as low as RVR 1200 are authorized by this order. This order addresses the ground equipment requirements necessary for approval of a CAT II ILS approach. For information on other requirements, such as operator and airworthiness requirements, refer to AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach (current edition).

2. Air Traffic Control Tower (ATCT). CAT II operations require an operational ATCT to ensure separation of airborne and ground traffic in low visibility conditions, to ensure proper protection of the localizer and glideslope critical areas, and to accomplish the required monitoring of ground equipment.

3. Required Lighting and Ancillary Equipment. To be eligible for standard CAT II operations at RVR 1600 or 1200, runways must have, or be qualified for, a part 97 CAT I SIAP with a DH of 200 feet, with at least the following ancillary components:

a. An ALSF-2,

b. HIRL,

c. TDZ lighting, and

d. RCL lighting.

e. Runway and approach lighting systems must have standby power with a one second transfer and must be remotely monitored so that aircraft can be notified immediately if they become inoperative.

f. All CAT II operations require a touchdown RVR sensor. A rollout sensor is also required for CAT II operations below RVR 1600. When the runway is in excess of 8000 feet in length, a midpoint RVR sensor is required in addition to the touchdown and rollout sensors for CAT II operations below RVR 1600. AFS-400 may approve CAT II operations on a runway in excess of 8000 feet with only a TDZ and rollout sensor on a case-by-case basis.

g. The touchdown RVR system must have standby power with a one second transfer in the event of a primary power source outage.

4. Instrument Landing System.

a. The ILS must be certified and maintained, and the critical areas must be protected to provide not less than performance classification II/D/2. ILS performance standards to point D are defined in Order 8200.1, United States Standard Flight Inspection Manual (current edition). Level 2 continuity of service requirements are defined in Order 6750.24, Instrument Landing System and Ancillary Electronic Component Configuration and Performance Requirements (current edition), and Order 6750.57, Instrument Landing System Continuity of Service Requirements and Procedures (current edition). Additionally, in accordance with Order 6750.24, operational constraints may be used to accommodate excessively large critical areas.

b. The localizer and glideslope must be dual transmitter and dual monitor systems to provide the required redundancy and integrity to support CAT II approach and landing operations.

c. An inner marker is not required to support CAT II approach and landing operations, unless an RA minimum is not authorized due to terrain, obstacles, or other local requirements.

d. The LOC, glideslope, and inner marker (if operationally required due to terrain) operational status (e.g., on/off), must be remotely monitored by the controlling ATC element. This status monitoring is distinct from any remote maintenance monitoring for the benefit of maintenance personnel, and distinct from the local executive integrity monitor which automatically shuts down the facility when monitored parameters exceed specified tolerances. The remote status monitoring can be implemented by landlines, through-the-air receivers, fiber optics, radio links, etc.

e. The LOC, glideslope, and inner marker (if operationally required) must have an approved backup power source which provides an uninterrupted power supply in the event of a primary power source outage.

f. A LOC far field monitor is required.

5. Instrument Approach Procedure (IAP).

a. The localizer final course alignment must be coincident with the runway centerline.

b. The commissioned glide path angle shall be 3.0 degrees. Angles other than 3.0 degrees require approval of FAA Flight Standards Service.

c. The commissioned TCH/RDH/ARDH shall be between 50 and 60 feet with the optimum being 55 feet. Any deviation must meet current TERPS CAT II/III development standards, or must have a formal Flight Standards waiver to TERPS.

d. Obstacle Free Zone (OFZ) must meet the CAT II/III OFZ standards described in AC 150/5300-13.

e. Obstructions must not penetrate the approach light plane in accordance with Order 6850.2 and AC 150/5340-30.

f. The missed approach segment must meet the current TERPS CAT II/III development standard.

g. Aviation System Standards develops these procedures in accordance with the standard TERPS CAT II development criteria and process as a part 97 SIAP. The line of minima shall be published in the standard format used for RA minima unless an RA minima is not authorized. Include the standard CAT II annotation: “Category II ILS-Special Aircrew & Aircraft Certification Required.” If the ATCT does not provide continuous service, publish a note on the chart indicating the procedure is not authorized when the tower is closed.

6. Operational Approval.

a. Requests for standard CAT II SIAPs for a specific runway can be initiated by any operator or organization.

b. Distribution and coordination of all checklists in Appendix D is the responsibility of the regional All Weather Operations Program Manager (AWOPM). Each checklist must be completed and signed by appropriate personnel. However, further confirmation of all items on the checklists is at the discretion of the regional AWOPM.

c. Airport sponsor involvement (letter of concurrence) is required and must be submitted through the appropriate ADO or Airport Regional Office, as applicable. This may include the willingness to remove obstacles, provide resources such as personnel and funding, and install additional equipment such as lights, markings, signage, etc.

d. Technical Operations Services must agree to install/adjust and maintain the facility to the required performance classification standard as described in this order and in Order 8200.1, and ensure that it meets integrity, continuity, and mean time between outage (MTBO) requirements as described in Order 6750.24 and Order JO 6750.57.

e. The ILS must be certified to CAT II flight inspection tolerances.

f. Operational review and approval, by the AWOPM, of a particular aircraft type and site specific performance, regarding “special terrain” airport runways, is necessary for all CAT II minimum approvals that are predicated on the use of autoland or other flight guidance systems (e.g., HUD) to touchdown.

g. Only those operators with an authorized OpSpec, MSpec, or LOA for CAT II operations using aircraft operationally approved for CAT II operations may be considered eligible for these operations.

h. Any failures of the ILS and ancillary components which support CAT II operations that would normally downgrade the system must be acted on in accordance with the procedures contained in Order 6750.24.

Chapter 5. Special Authorization CAT II Approach Operations

1. Scope. Special Authorization CAT II approaches with a DH as low as 100 feet and visibility minima as low as RVR 1200 using aircraft autoland or HUD approved to touchdown are authorized by this order. CAT II procedures developed and approved using the criteria contained in previous versions of this order do not require any additional changes for continued use, but must continue to meet either the criteria at initial approval or the current criteria in this order. The ILS and ground facilities must meet all CAT II requirements as listed in chapter 4, to support CAT II operations, except for the items specifically identified as not required in this chapter.

2. Air Traffic Control Tower (ATCT). Special Authorization CAT II operations require an operational ATCT to ensure separation of airborne and ground traffic in low visibility conditions, to ensure proper protection of the localizer and glideslope critical areas, and to accomplish the required monitoring of ground equipment.

3. Runways. The runway must have a declared landing distance of 6000 feet or greater.

4. Required Lighting and Ancillary Equipment. To be eligible for Special Authorization CAT II, runways must have, or be qualified for, a part 97 CAT I SIAP with a DH of 200 feet and a visibility minimum not more than RVR 1800, with at least the following ancillary components:

a. An SSALR, MALSR (with threshold bar that is separate from runway end lights), ALSF-1/ALSF-2,

b. HIRL,

c. Special Authorization CAT II operations at RVR 1600 require a TDZ sensor of an RVR reporting system. Special Authorization CAT II operations at RVR 1200 require not less than 2 sensors of an RVR reporting system, and one of the required sensors must be for the TDZ.

d. Runway lighting systems must have standby power with a one second transfer and must be remotely monitored so that aircraft can be notified immediately if they become inoperative. An alternative where remote monitoring is not available is to station a cognizant person in a position to visually monitor the runway lighting system during low-visibility operations, to immediately notify the controlling air traffic control (ATC) element if they become inoperative.

e. The approach lighting system does not require standby power or remote monitoring.

5. Instrument Landing System.

a. If the ILS facility has restrictions, it must be approved by AFS-400 in coordination with AJW-33 on a case-by-case basis. The ILS must be certified and maintained, and the critical areas must be protected to provide not less than performance classification II/D/2. ILS performance standards to point D are defined in Order 8200.1. Level 2 continuity of service requirements are defined in Order 6750.24 and Order 6750.57. Additionally, in accordance with Order 6750.24, operational constraints may be used to accommodate excessively large critical areas.

b. Dual transmitter facilities are recommended, but single transmitter facilities are also acceptable. The critical area requirement for single frequency systems may be too large to protect, therefore dual frequency systems are required.

c. An inner marker is not required to support CAT II approach and landing operations, unless an radar altimeter (RA) minimum is not authorized due to terrain, obstacles, or other local requirements.

d. The LOC, glideslope, and inner marker (if operationally required due to terrain) operational status (e.g., on/off), must be remotely monitored by the controlling ATC element. This status monitoring is distinct from the any remote maintenance monitoring for the benefit of maintenance personnel, and distinct from the local executive integrity monitor which automatically shuts down the facility when monitored parameters exceed specified tolerances. The remote status monitoring can be implemented by landlines, through-the-air receivers, fiber optics, radio links, etc. An alternative where none of these is available is to station a cognizant person at each subsystem during low-visibility operations, to immediately notify the controlling ATC element when the LOC or glideslope is turned off by the executive integrity monitor.

e. A LOC far field monitor is not required.

6. Instrument Approach Procedure. Aviation System Standards develops these procedures in accordance with the standard TERPS CAT II development criteria and process as a part 97 SIAP. In addition to the standard CAT II annotation: “CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED,” include the following in the notes section of Form 8260-3: “Chart Note: Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.” If the ATCT does not provide continuous service, publish a note on the chart indicating the procedure is not authorized when the tower is closed.

7. Operational Approval.

a. Requests for Special Authorization CAT II SIAPs for a specific runway can be initiated by any operator or organization.

b. Distribution and coordination of all checklists in Appendix C is the responsibility of the regional AWOPM. Each checklist must be completed and signed by appropriate personnel. However, further confirmation of all items on the checklists is at the discretion of the regional AWOPM.

c. Airport sponsor involvement (letter of concurrence) is required and must be submitted through the appropriate ADO or Airport Regional Office, as applicable. This may include the willingness to remove obstacles, provide resources such as personnel and funding, and install additional equipment such as lights, markings, signage, etc.

d. Only those operators with an authorized OpSpec, MSpec, or LOA for CAT II operations using aircraft currently operationally approved for CAT III operations (i.e., autoland or HUD approved to touchdown capability) may be considered eligible for these operations. The OpSpec,

MSpec, or LOA must include the limitation requiring the use of autoland or HUD to touchdown as a condition of the minimum.

e. Technical Operations Services must agree to adjust and maintain the facility to a CAT II Performance Classification standard and ensure that it meets at least Level 2 integrity, continuity, and MTBO requirements. (For classification system ratings, see Order 6750.24 and Order JO 6750.57, current edition).

f. The ILS must be certified to CAT II flight inspection tolerances including the LOC CAT III structure to Point D. The first two characters of the ILS Performance Classification system rating will be published in the appropriate Airport Facility Directory (AFD).

g. Operational review and approval, by the AWOPM, of a particular aircraft type and site specific performance, regarding “special terrain” airport runways, is necessary for CAT II minimum approvals because it is predicated on the use of autoland or other flight guidance systems (e.g., HUD) to touchdown.

h. Approved standard CAT II and III facilities are also authorized for continued CAT II operations in the event of a failure of TDZ and/or RCL lighting, or a downgrade from an ALSF-1 or ALSF-2 to a SSALR if authorized in the operator's OpSpec, MSpec, or LOA.

i. This operation cannot be promulgated as an ICAO operational performance CAT II due to the lack of TDZ and RCL and ALSF-2 lighting systems, as required by Annex 14. However, with those exceptions, any failures that would normally downgrade the system (including any changes to required procedures, such as visual or remote monitoring procedures), based on directive requirements such as Order 6750.24, etc., must be acted on in accordance with the standard procedures in effect for any CAT II authorization.

Chapter 6. CAT II RVR 1000 Approach Operations

1. Scope. This order authorizes CAT II approaches with a DH as low as 100 feet and visibility minima of RVR 1000 using aircraft autoland or HUD approved to touchdown to runways which meet all CAT II equipment, performance, and lighting requirements.

2. Air Traffic Control Tower (ATCT). CAT II operations require an operational ATCT to ensure separation of airborne and ground traffic in low visibility conditions, to ensure proper protection of the localizer and glideslope critical areas, and to accomplish the required monitoring of ground equipment.

3. Required Lighting and Ancillary Equipment. To be eligible for CAT II operations at RVR 1000, runways must meet all equipment, performance, and lighting requirements for a standard CAT II runway as listed in chapter 4. Additionally, the airport must have an approved Surface Movement Guidance and Control System (SMGCS) operation with an approved taxi routing from the landing runway to the non-movement area suitable for surface operations below RVR 1200.

4. Instrument Landing System (ILS).

a. The ILS must meet all requirements of a CAT II ILS facility as listed in chapter 4.

b. The ILS must be certified and maintained, and the critical areas must be protected to provide not less than performance classification II/D/2. ILS performance standards to point D are defined in Order 8200.1. Level 2 continuity of service requirements are defined in Order 6750.24 and Order 6750.57. Additionally, in accordance with Order 6750.24, operational constraints may be used to accommodate excessively large critical areas.

5. Instrument Approach Procedure. Aviation System Standards develops these procedures in accordance with the standard TERPS CAT II development criteria and process as a part 97 SIAP. In addition to the standard CAT II annotation: “CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED,” include the following in the notes section of Form 8260-3: “Chart Note: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.” If the ATCT does not provide continuous service, publish a note on the chart indicating the procedure is not authorized when the tower is closed.

6. Operational Approval.

a. Completion of the checklists in Appendix D is not required for runways with published CAT II minima to RVR 1200. When implementing new CAT II or CAT III minima, CAT II to RVR 1000 is an option on the checklists in Appendix D.

b. Requests for CAT II SIAPs to RVR 1000 for a specific runway can be initiated by any operator or organization.

c. CAT II operations to RVR 1000 will be added to existing CAT II SIAPS in accordance with a schedule established by the RAPT.

d. Only those operators with an authorized OpSpec, MSpec, or LOA for CAT II operations using aircraft currently certified and operationally approved for CAT III operations (i.e., autoland or HUD certified to touchdown capability) may be considered eligible for these operations. The OpSpec, MSpec, or LOA must include the limitation requiring the use of autoland or HUD to touchdown as a condition of the minimum.

e. The ILS must be certified to CAT II flight inspection tolerances including LOC CAT III structure to Point D. The first two characters of the ILS Performance Classification system rating will be published in the appropriate Airport Facility Directory (AFD).

f. Operational review and approval, by the AWOPM, of a particular aircraft type and site specific performance, regarding “special terrain” airport runways, is necessary for CAT II minimum approvals because it is predicated on the use of autoland or other flight guidance systems (e.g., HUD) to touchdown.

Chapter 7. Standard CAT III Approach Operations

1. Scope. CAT III approaches with minimums as low as RVR 300 without a DH are authorized by this order. This order addresses the ground equipment requirements necessary for approval of a CAT III ILS approach. For information on other requirements, such as operator and airworthiness requirements, refer to AC 120-28, Criteria for Approval of Category III Weather Minima for Takeoff, Landing, and Rollout (current edition).

2. Air Traffic Control Tower (ATCT). CAT III operations require an operational ATCT to ensure separation of airborne and ground traffic in low visibility conditions, to ensure proper protection of the localizer and glideslope critical areas, and to accomplish the required monitoring of ground equipment.

3. Required Lighting and Ancillary Equipment. To be eligible for CAT III operations, runways must have at least the following ancillary components:

a. An ALSF-2,

b. HIRL,

c. TDZ lighting, and

d. RCL lighting.

e. Runway and approach lighting systems must have standby power with a one second transfer and must be remotely monitored so that aircraft can be notified immediately if they become inoperative.

f. CAT III operations require a TDZ, midpoint, and rollout sensor of an RVR reporting system. AFS-400 may approve CAT III operations on a runway with only a TDZ and rollout sensor on a case-by-case basis.

g. Each required RVR system must have standby power with a one second transfer in the event of a primary power source outage.

h. The airport must have an approved SMGCS operation with an approved taxi routing from the landing runway to the non-movement area suitable for operations below RVR 1200 or RVR 600, as applicable to the landing minimums sought.

4. Instrument Landing System (ILS).

a. The ILS must be certified and maintained, and the critical areas must be protected to provide not less than performance classification:

(1) III/D/3 for operations as low as RVR 700,

(2) III/E/3 for operations as low as RVR 600, or

(3) III/E/4 for operations as low as RVR 300.

b. ILS performance standards to point D or point E are defined in Order 8200.1, United States Standard Flight Inspection Manual. Level 3 and level 4 continuity of service requirements are defined in Order 6750.24 and Order 6750.57. Additionally, in accordance with Order 6750.24, operational constraints may be used to accommodate excessively large critical areas.

c. The localizer and glideslope must be dual transmitter and dual monitor systems to provide the required redundancy and integrity to support CAT III approach and landing operations.

d. The LOC and glideslope, and inner marker (if operationally required due to terrain) operational status (e.g., on/off), must be remotely monitored by the controlling ATC element. This status monitoring is distinct from any remote maintenance monitoring for the benefit of maintenance personnel, and distinct from the local executive integrity monitor which automatically shuts down the facility when monitored parameters exceed specified tolerances. The remote status monitoring can be implemented by landlines, through-the-air receivers, fiber optics, radio links, etc.

e. The LOC, glideslope, and inner marker (if operationally required) must have a backup power source which provides an uninterrupted power supply in the event of a primary power source outage.

f. A LOC far field monitor is required.

5. Instrument Approach Procedure (IAP).

a. The localizer final course alignment must be coincident with the runway centerline.

b. The commissioned glide path angle shall be 3.0 degree. Angles other than 3.0 degree require approval of FAA Flight Standards Service.

c. The commissioned TCH/RDH/ARDH shall be between 50 and 60 feet with the optimum being 55 feet. Any deviation must meet current TERPS CAT II/III development standards, or must have a formal Flight Standards waiver to TERPS.

d. OFZs must meet the CAT II/III OFZ standards described in AC 150/5300-13.

e. Obstructions must not penetrate the approach light plane in accordance with Order 6850.2 and AC 150/5340-30.

f. The missed approach segment must meet the current TERPS CAT II/III development standard.

g. Aviation System Standards develops these procedures in accordance with the standard TERPS CAT III development criteria and process as a part 97 SIAP. The line of minima shall be published in the standard format used for RA minima. Include the standard CAT III annotation: “CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED.” If the ATCT does not provide continuous service, publish a note on the chart indicating the procedure is not authorized when the tower is closed.

6. Operational Approval.

a. Requests for standard CAT III SIAPs for a specific runway can be initiated by any operator or organization.

b. Distribution and coordination of all checklists in Appendix D is the responsibility of the regional AWOPM. Each checklist must be completed and signed by appropriate personnel. However, further confirmation of all items on the checklists is at the discretion of the regional AWOPM.

c. Airport sponsor involvement (letter of concurrence) is required and must be submitted through the appropriate ADO or Airport Regional Office, as applicable. This may include the willingness to remove obstacles, provide resources such as personnel and funding, and install additional equipment such as lights, markings, signage, SMGCS implementation, etc.

d. Technical Operations Services must agree to install/adjust and maintain the facility to the required performance classification standard as described in this order and in Order 8200.1, and ensure that it meets integrity, continuity, and MTBO requirements as described in Order 6750.24 and Order JO 6750.57.

e. The ILS must be certified to CAT III flight inspection tolerances.

f. Operational review and approval, by the AWOPM, of a particular aircraft type and site specific performance, regarding “special terrain” airport runways, is necessary for all CAT III minimum approvals that are predicated on the use of autoland or other flight guidance systems (e.g., HUD) to touchdown.

g. Any failures of the ILS and ancillary components which support CAT III operations that would normally downgrade the system must be acted on in accordance with the procedures contained in Order 6750.24.

h. Only those operators with an authorized OpSpec, MSpec, or LOA for CAT III operations using aircraft currently operationally approved for CAT III operations (i.e., autoland or HUD approved to touchdown capability) may be considered eligible for these operations.

Chapter 8. Responsibilities.

1. Flight Standards All Weather Operations Program Manager (AWOPM). The AWOPM having geographic responsibility for the area where the candidate airport is located will coordinate the procedure request with the RAPT. For CAT I RVR 1800 and RVR 1400 candidate approaches, the AWOPM will review proponent documentation and confirm the facility's compliance with this order. The AWOPM ensures airport sponsor involvement (letter of concurrence) for all CAT II/III operations. The AWOPM is also responsible for the distribution, collection, and review of the CAT II/III checklists (including Special Authorization CAT II) from Technical Operations, Terminal Services, and Airports. When implementing CAT II/III minima on new or existing ILS equipment, the AWOPM will request that technical operations sets or resets the monitor alarm limits and begins the continuity of service (CoS) evaluation in accordance with JO 6750.57. The AWOPM will review each checklist for completeness and required data and notify Aviation System Standards that all requirements have been met. When the completed AVN checklist is returned to the AWOPM, the AWOPM will review the completed checklists for completeness and required data. The AWOPM will maintain a copy of all completed checklists and a record of airport sponsor concurrence for as long as the approved procedure remains active. The AWOPM will notify AFS-400 whenever facilities are approved, modified, or deleted. The certificate management office/certificate-holding district office/Flight Standards District Office (CMO/CHDO/FSDO) evaluates proponent requests, approves training, and amends or issues OpSpecs, MSpecs, or LOA.

2. Regional Airspace and Procedures Team (RAPT). The RAPT evaluates and sets the priority for the procedure development in accordance with Order 8260.43, Flight Procedures Management Program (current edition).

3. Technical Operations. Completes evaluation checklist to allow assessment of runways for all CAT II and CAT III operations (including Special Authorization CAT II) and returns completed checklist to the regional AWOPM. Ensures LOC and glideslope beam performance, monitoring limits, and shutdown delays are maintained to the required tolerances and critical area boundaries are defined to protect CAT II and CAT III operations. When implementing CAT II/III minima on new or existing ILS equipment, resets the monitor alarm limits as appropriate and completes the CoS evaluation in accordance with JO 6750.57. Establishes and maintains ILS remote status monitoring capability (for LOC, GS, and marker beacons, if applicable) at the controlling ATC location. In the event of temporary failures of the remote status indications, provides visual monitoring and immediate notification of status changes to the controlling ATC element if personnel are available.

4. ATO Terminal Services. Completes evaluation checklist to assess runways for all CAT II and CAT III operations (including Special Authorization CAT II), including protection of the localizer critical area for autoland operations, and returns the completed checklist to the regional AWOPM. Supporting the implementation of CAT II and CAT III operations ensures that the applicable procedures are adhered to and accomplished as per established guidelines. This may include protection of ILS critical areas and weather reporting requirements for operating ATC towers, both federal and non-federal. Provides notification and training to all personnel on the new minimums or procedure. Documents agreements with the airport authority for notification of inoperative runway lights if that system does not meet standards. Upon failure of runway and

approach lighting systems (whether notified by remote status monitoring capability or visual inspections), implements established procedures to advise pilots of a runway or approach lighting system failure. Ensures procedures are in place to facilitate CAT II or CAT III approach and landing operations on the procedure publication date.

5. Regional Airports Division. Completes evaluation checklist to assess runways for all CAT II and CAT III operations (including Special Authorization CAT II) and returns the completed checklist to the regional AWOPM. Coordinates with airport operators to evaluate applicability of CAT II and CAT III requirements such as lights, signs, markings, etc..

6. Aviation System Standards (AJW-3).

a. The National Flight Procedures Office (NFPO). Supports implementation of CAT II/III operations by participating in the RAPT through the FPO. The NFPO amends the current CAT I procedure to include RVR 1800, amends the current CAT II procedure to include RVR 1000, and/or develops CAT I to RVR 1400, standard CAT II, standard CAT III, and Special Authorization CAT II procedures in accordance with the guidelines established by this order. The procedure will be developed or amended by the NFPO in accordance with the priority established by the regional RAPT.

b. The Flight Inspection Operations Division (AJW-33). In conjunction with the Technical Operations Services organization, accomplishes the following according to the operation being evaluated:

(1) CAT I Operations to RVR 1800. Certify that the ILS has no restrictions to LOC course structure and alignment or glide path structure, and verify these standards on subsequent flight inspections. If the ILS facility has restrictions, it must be approved by AFS-400 in coordination with AJW-33 on a case-by-case basis. If the facility cannot continue to maintain the required performance, take action to restrict the facility IAW the standard CAT I criteria in Order 8200.1.

(2) Special Authorization CAT I Operations. Certify that the ILS has no restrictions to LOC course structure and alignment or glide path structure, and verify these standards on subsequent flight inspections. If the ILS facility has restrictions, it must be approved by AFS-400 in coordination with AJW-33 on a case-by-case basis. If the facility cannot continue to maintain the required performance, take action to restrict the facility in accordance with the standard CAT I criteria in Order 8200.1. Also, completes evaluation checklist to allow assessment of runways for special authorization CAT I operations, and returns the checklist to the Flight Standards AWOPM.

(3) Standard CAT II Operations. Certify that the ILS conforms to the applicable flight inspection related performance requirements stated in chapter 4, paragraph 4a and verify these standards on subsequent flight inspections. The glideslope must meet CAT II performance requirements to point T, as specified in Order 8200.1. If the facility cannot continue to maintain the required performance, take action to restrict the facility, such as issuing NOTAMs, if the ILS facility or other required equipment fails to meet its performance requirements in accordance with the standard CAT II criteria in Order 8200.1. Also, completes evaluation checklist to allow

assessment of runways for CAT II operations, and returns the checklist to the Flight Standards AWOPM.

(4) Special Authorization CAT II Operations. Certify that the ILS conforms to the applicable flight inspection related performance requirements stated in chapter 5, paragraph 4a and verify these standards on subsequent flight inspections. The glideslope must meet CAT II performance requirements to point T, as specified in Order 8200.1. If the facility cannot continue to maintain the required performance, take action to restrict the facility, such as issuing NOTAMs, if the ILS facility or other required equipment fails to meet its performance requirements in accordance with the standard CAT II criteria in Order 8200.1. Also, completes evaluation checklist to allow assessment of runways for CAT II operations, and returns the checklist to the Flight Standards AWOPM.

(5) CAT II Operations to RVR 1000. Certify that the ILS conforms to the applicable flight inspection related performance requirements stated in chapter 6, paragraph 4b and verify these standards on subsequent flight inspections. The glideslope must meet CAT II performance requirements to point T, as specified in Order 8200.1. If the facility cannot continue to maintain the required performance, take action to restrict the facility, such as issuing NOTAMs, if the ILS facility or other required equipment fails to meet its performance requirements in accordance with the standard CAT II criteria in Order 8200.1.

(6) Standard CAT III Operations. Certify that the ILS conforms to the applicable flight inspection related performance requirements stated in chapter 7, paragraph 4a and verify these standards on subsequent flight inspections. If the facility cannot continue to maintain the required performance, take action to restrict the facility, such as issuing NOTAMs, if the ILS facility or other required equipment fails to meet its performance requirements in accordance with the standard CAT III criteria in Order 8200.1. Also, completes evaluation checklist to allow assessment of runways for CAT III operations, and returns the checklist to the Flight Standards AWOPM.

7. Airport. The airport establishes markings and signs, and removes obstructions as necessary, to support CAT II and CAT III ILS Operations. The airport layout plan will be amended by the airport when necessary. The airport installs the required equipment to provide one second backup power to runway lighting systems. If necessary, due to equipment limitations, the airport provides visual monitoring for lights that do not have remote monitoring. The airport provides information to the Regional Airports Division for the completion of the evaluation checklist. The airport creates a SMGCS Plan and implements an approved SMGCS operation.

8. Explanation of Appendices.

a. Appendix A. Contains a listing of relevant ACs and FAA Orders.

b. Appendix B. Contains a listing of abbreviations and acronyms used in this order.

c. Appendix C. Contains a set of checklists for use by Technical Operations, Terminal Services, Airports, Aviation System Standards, and Flight Standards personnel to evaluate potential for Special Authorization CAT II operations. Other checklists, such as checklists from previous versions of this order, may be acceptable if these checklists provide sufficient

information for Flight Standards authorization. These checklists are also available on the AFS-410 Web site at: http://www.faa.gov/about/office_org/headquarters_offices /avs/offices/afs/afs400/afs410/

d. Appendix D. Contains a set of checklists for use by Technical Operations, Terminal Services, Airports, Aviation System Standards, and Flight Standards personnel to evaluate potential for standard CAT II and standard CAT III operations. Other checklists, such as checklists from previous versions of this order, may be acceptable if these checklists provide sufficient information for Flight Standards authorization. These checklists are also available on the AFS-410 Web site at: http://www.faa.gov/about/office_org/headquarters_offices /avs/offices/afs/afs400/afs410/.

9. Disposition. The Flight Operations Branch (AFS-410), of the Flight Technologies and Procedures Division (AFS-400), establishes criteria for the procedures authorized by this order. Direct questions or comments regarding minimum reduction for operations conducted with properly equipped aircraft to AFS-410, at (202) 385-4625. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this order on Federal Aviation Administration (FAA) Form 1320-19, Directive Feedback Information, and forward your comments to the originating office for consideration. If an interpretation is needed immediately, call the originating office for guidance. However, use FAA Form 1320-19 as a followup to verbal conversation.

U.S. Department of
Transportation
**Federal Aviation
Administration**

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it,

Subject: Order 8400.13D
To: Directive Management Officer, _____

(Please check all appropriate line items)

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows: *(attach separate sheet if necessary)*

☐ In a future change to this directive, please include coverage on the following subject (briefly describe what you want added):

☐ Other comments:

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____

FTS Telephone Number: _____ Routing Symbol: _____

FAA Form 1320-19 (8-89)

Appendix A. References

1. AC 97-1, Runway Visual Range (RVR).

2. AC 120-28, Criteria for Approval of Category III Weather Minima for Takeoff, Landing, and Rollout.

3. AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach.

4. AC 150/5300-13, Airport Design.

5. AC 150/5340-1, Standards for Airport Markings.

6. AC 150/5340-18, Standards for Airport Sign Systems.

7. AC 150/5340-30, Design and Installation Details for Airport Visual Aids.

8. FAA Order 6560.10, Runway Visual Range (RVR).

9. FAA Order 6560.29, New Generation Runway Visual Range System.

10. FAA Order 6750.16, Siting Criteria for Instrument Landing Systems.

11. FAA Order 6750.24, Instrument Landing System and Ancillary Electronic Component Configuration and Performance Requirements.

12. FAA Order JO 6750.57, Instrument Landing System Continuity of Service Requirements and Procedures.

13. FAA Order 6850.2, Visual Guidance Lighting Systems.

14. FAA Order 6950.2, Electrical Power Policy Implementation at National Airspace System Facilities.

15. FAA Order 7110.65, Air Traffic Control.

16. FAA Order 8200.1, United States Standard Flight Inspection Manual.

17. FAA Order 8240.47, Determination of ILS Glidepath Angle, RDH, and GPI.

18. FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

19. FAA Order 8260.19, Flight Procedures and Airspace.

20. FAA Order 8260.23, Calculation of Radio Altimeter Height.

21. FAA Order 8260.43, Flight Procedures Management Program.

22. Flight Operations Branch (AFS-410) Web site at
http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs410/.

23. Flight Procedure Standards Branch (AFS-420) Web site at
http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs420/.

24. ICAO Annex 10, Aeronautical Telecommunications.

Appendix B. Abbreviations and Acronyms

AC	Advisory Circular	ILS	Instrument Landing System
ADO	Airports District Office	IM	Inner Marker
AFD	Airport/Facilities Directory	LOA	Letter of Authorization / Letter of Agreement
ALSF	Approach Lighting System With Sequenced Flashing Lights	LOC	Localizer
AP	Autopilot	MALSR	Medium Intensity Approach Lighting System with RAIL
ARDH	Achieved Reference Datum Height	MM	Middle Marker
ATC	Air Traffic Control	MSpec	Management Specification
ATCT	Air Traffic Control Tower	MTBO	Mean Time Between Outages
ATIS	Automated Terminal Information Service	NAS	National Airspace System
AVN	Aviation System Standards	NCP	NAS Change Proposal
AWOPM	All Weather Operations Program Manager	NFPO	National Flight Procedures Office
CAT	Category	NOTAM	Notice to Airmen
CFR	Code of Federal Regulations	OFZ	Obstacle Free Zone
CHDO	Certificate Holding District Office	OM	Outer Marker
CMO	Certificate Management Office	OpSpec	Operations Specification
DA	Decision Altitude	RA	Radar Altimeter
DH	Decision Height	RAIL	Runway Alignment Indicator Lights
FD	Flight Director	RA NA	Radar Altimeter minimums Not Authorized
FPO	Flight Procedures Office	RAPT	Regional Airspace and Procedures Team
FSDO	Flight Standards District Office	RCL	Runway Center Line
FSIMS	Flight Standards Information Management System	RDH	Reference Datum Height
GPI	Ground Point of Intercept	RVR	Runway Visual Range
GS	Glideslope	SAACR	Special Aircrew and Aircraft Certification Required

HATh	Height Above Threshold	SIAP	Standard Instrument Approach Procedure
HAT	Height Above Touchdown	SMGCS	Surface Movement Guidance and Control System
HIRL	High Intensity Runway Lights	SSALR	Simplified Short Approach Lighting System with RAIL
HUD	Head-up Display	TCH	Threshold Crossing Height
IAP	Instrument Approach Procedure	TDZ	Touchdown Zone
ICAO	International Civil Aviation Organization	TERPS	Terminal Instrument Procedures

Appendix C. Sample Checklists for Evaluating Ground Facilities for Special Authorization CAT II Operations

The basis of approval for airports having instrument landing system (ILS) ground facilities for Special Authorization Category (CAT) II operations is contained in the following checklists.

Coordination of checklists will be accomplished by the assigned All Weather Operations Program Manager (AWOPM). Sample checklists for Technical Operations, Terminal Services, Airports, and Aviation System Standards (AJW)-33 are provided.

Pre-Checklist			
Coordinate the evaluation of the Type _____ equipment for Runway _____ at			
AIRPORT	**CITY**	**STATE**	
to determine its capability to provide CAT II approach and landing minimums.			
Date requested:			
Requested by:			
Airport Manager's concurrence obtained ..... ☐Yes ☐No			
CAT II minimum:	**DH**	**HAT**	**RVR**
Post-Checklist			
Procedure was coordinated with the RAPT ..... ☐Yes ☐No			
All checklists are signed and all discrepancies have been resolved..... ☐Yes ☐No			
CAT II flight inspection completed satisfactorily..... ☐Yes ☐No			
CAT II minimum:	**DH**	**HAT**	**RVR**
Comments:			
Target dates for attainment of Continuity of Service (CoS) and Part 97 publication:			
CAT II CoS:	Target Publication Date:		

All Weather Operations Program Manager (Print) **Signature** **Date**

COORDINATION WITH THE FOLLOWING OFFICES:

OFFICE	**PROVIDED**	**RETURNED**	**OK?**
Technical Operations:			
Discrepancies/Comments:			
Resolution:			
Terminal Services:			
Discrepancies/Comments:			
Resolution:			
Airports:			
Discrepancies/Comments:			
Resolution:			
AVIATION SYSTEM STANDARDS:			
Flight Inspection (AJW-33):			
Discrepancies/Comments:			
Resolution:			
Flight Procedures (AJW-32):			
Discrepancies/Comments:			
Resolution:			

Technical Operations Checklist for Special Authorization CAT II Operations

Runway: _____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to provide Class II/D/2 performance in support of the proposed CAT II approach and landing operations.

CAT II RVR 1600 (II/D/2):	☐Yes ☐No	CAT II RVR 1200 (II/D/2):	☐Yes ☐No

Confirm that all ground system requirements in Order 8400.13, chapter 5, applicable to Technical Operations are met. Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards All Weather Operations Program Manager (AWOPM) in order to preclude delay of CAT II service to the users. Once approval is granted, Flight Standards will issue authorization for CAT II operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your CAT II/III coordinator for monitoring the accomplishment of your checklist.

AWOPM:	Phone Number:
Alternate:	Phone Number:

Please set monitor alarms to CAT II tolerances and initiate CoS.

II. General Data.

A. Facility ID:
B. Glideslope (GS) Angle: _____ degrees.
C. Published Threshold Crossing Height _____ feet.

III. ILS Systems. (Ref. AC 120-29 and Order 6750.24.)

A. LOC and GS equipment and array type (e.g., Mark 20 and 14-element, capture-effect, etc.)		
LOC/array type:		
GS equipment type:		
Far Field Monitor installed: (not required)		☐Yes ☐No
B. Facility is certified for and capable of maintaining a performance classification of at least Class II/D/2 (Ref. Order 6750.24)		☐Yes ☐No
CAT II Monitor Start Date...	CAT II Flight Inspection Date	
CoS Start Date.....	Estimated CoS Completion Date ...	

Notify the Flight Standards AWOPM upon completion of CoS burn-in requirements.

C. Remote Status Monitors (LOC/GS) (Ref. Order 6750.16) ..... ☐Yes ☐No

Location(s):	LOC:	GS:
D. Marker Beacons: (Ref. Order 6750.16)		
Outer Marker installed (not required): ☐Yes ☐No		
Middle Marker installed (not required): ☐Yes ☐No		
Inner Marker installed: (for "RA NA" operations) ☐Yes ☐No		
E. Approach Light System (MALSR, SSALR, or ALSF-1/2; Ref Order 6850.2) installed: ☐Yes ☐No		
Monitored (Ref. Order 6750.24)? ☐Yes ☐No		
Green threshold bar installed? ☐Yes ☐No		
Approach light system mounted on frangible fixtures? ☐Yes ☐No		
F. The localizer and glideslope critical areas are adequate to support CAT II/III operations: ☐Yes ☐No		
Are the LOC and GS critical areas standard (Ref. Order 6750.16)?: ☐Yes ☐No		
If critical areas are non-standard, provide a description and attach critical area drawings:		

IV. Runway Visual Range Equipment. (1600 RVR, one sensor required; 1200 RVR, two sensors required, Ref. Orders 6750.24 and 6560.10.)

Installed in accordance with AC 97-1 and Order 6560.29: ☐Yes ☐No
Type equipment (Make/Model):
Touchdown installed: ☐Yes ☐No
Midpoint installed: ☐Yes ☐No
Rollout installed: ☐Yes ☐No
Far-End installed (not required): ☐Yes ☐No

V. Electrical Power Requirements. Indicate whether the following components meet CAT II standards for backup power and power transfer (Ref. Order 6950.2) (Enter "NA" if not installed)

Localizer ☐Yes ☐No
Glideslope ☐Yes ☐No
Outer Marker ☐Yes ☐No ☐NA
Middle Marker ☐Yes ☐No ☐NA
Inner Marker ☐Yes ☐No ☐NA
RVR (Touchdown) ☐Yes ☐No

RVR (Midpoint)..... ☐Yes ☐No ☐NA	
RVR (Rollout)..... ☐Yes ☐No ☐NA	
ALSF-1/2, SSALR, MALSR..... ☐Yes ☐No ☐NA	

VI. Obstruction Clearance. Document review completed by the Flight Procedures Officer to confirm the following NAVAIDs meet siting standards (Ref. Order 6750.16) and the interim TERPS requirements of AFS-400

Localizer Antenna: ☐Yes ☐No	Glideslope Mast/Antenna: ☐Yes ☐No
Remarks:	

VII. Additional Information:

A. List all approved and pending National Airspace System (NAS) Change Proposals (NCP) applicable to the facilities in this checklist (ILS, approach lights, RVR, etc.):
B. Indicate the Tech Ops Systems Support Center and hours of coverage for qualified technicians on duty at the airport for this system:

Category II/III Coordinator (Print)	**Signature**	**Date**

Manager, Service Area Operations Engineering Group (Print)	**Signature**	**Date**

ATO Terminal Services Checklist for Special Authorization CAT II Operations

Runway: _____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to support the proposed CAT II approach and landing operations.

CAT II RVR 1600:	☐Yes ☐No	CAT II RVR 1200:	☐Yes ☐No

Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards AWOPM in order to preclude delay of CAT II service to the users. Once approval is granted, Flight Standards will issue authorization for CAT II operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your staff member/point of contact for monitoring the accomplishment of your checklist.

AWOPM:	Phone Number:
Alternate:	Phone Number:

II. Category II ILS Operational Requirements: (Ref. Order 7210.3)

A. LOA coordinated with the appropriate offices (i.e., Technical Operations, Airports Division/District Office, Flight Standards AWOPM, and Airport Authority). (Please attach copy)..... ☐Yes ☐No ☐NA

III. <u>Monitor Capability and Coordination.</u> (Ref. AC 120-29):

A. Verify that monitoring capability exists in the Air Traffic Control Tower (ATCT) for:
Localizer: ..... ☐Yes ☐No
Glideslope: ..... ☐Yes ☐No
Inner Marker (for RA NA operations): ..... ☐Yes ☐No ☐NA
B. Arrangements exist for airport personnel to advise ATCT whenever the runway lighting system does not meet CAT II requirements ..... ☐Yes ☐No
C. Is an approved electrical monitoring system installed in the ATCT for the approach light system?..... ☐Yes ☐No

IV. <u>Power Transfer.</u> (Ref. AC 120-29):

A. Arrangements exist to start engine generators for:
(1) RVR: ..... ☐Yes ☐No ☐NA
(2) Runway Lights (check all that apply): ..... ☐HIRL ☐TDZ ☐RCL ☐None
(3) Approach light system and power vault (if ALSF installed) ..... ☐Yes ☐No

V. Communications. (Ref. Order 7110.65):

A. Positive Control of Aircraft and Ground Vehicles on Runway and ILS Critical Areas (AC 120-29, AC 150/5340-1, and Order 7110.65)..... ☐Yes ☐No
B. Indicate how facility outages and airport conditions (Order 7110.65 and 7210.3) are reported (ATIS, NOTAM, etc.) .....

Facility Air Traffic Manager (Print) **Signature** **Date**

Airports Division Checklist for Special Authorization CAT II Operations

Runway: _____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to support the proposed CAT II approach and landing operations.

CAT II RVR 1600:	☐Yes ☐No	CAT II RVR 1200:	☐Yes ☐No

Confirm that all ground systems and obstacle clearance requirements are met. Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards AWOPM in order to preclude delay of CAT II service to the users. Once approval is granted, Flight Standards will issue authorization for CAT II operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your staff member/point of contact for monitoring the accomplishment of the checklist.

AWOPM:	Phone Number:
Alternate :	Phone Number:

II. Lighting Aids. Indicate if the following visual aids meet installation standards. If a modification to an airport design standard was approved, list each approval in section VII. (Ref. AC 150/5340-30C and Order 6850.2)

A. High Intensity Runway Edge Lights ..... ☐Yes ☐No
B. Threshold/Runway End Lights (in addition to threshold lights which are integral to the approach light system) ..... ☐Yes ☐No
C. Runway Centerline Lights (not required) ..... ☐Yes ☐No ☐NA
D. Runway Touchdown Zone Lights (not required) ..... ☐Yes ☐No ☐NA
E. Approach Lights (MALSR, SSALR, or ALSF-1/2) (if non-federal)..... ☐Yes ☐No ☐NA

III. Monitoring of Lighting Aids.

A. Arrangements for airport personnel to advise ATCT whenever the runway lighting system does not meet CAT II requirements	☐Yes ☐No
B. Specify the organization responsible for remote monitoring or visual inspection of lighting components. Enter "none" if not installed:	

Component	Remote Monitor	Visual Inspection
(1) Runway Edge Lights:		
(2) Runway Centerline Lights:		
(3) Runway Touchdown Zone Lights:		
(4) Approach Lights (if non-federal):		

IV. Surface Markings and Signs Installed. (Ref. AC 150/5340-1, AC 150/5340-18, Order 6750.16, and Order 7110.65)

A. Precision Instrument Runway Markings	☐Yes ☐No
B. Runway Holding Position Markings and Signs.....	☐Yes ☐No
C. CAT II ILS Critical Areas Identified. ILS Critical Area Holding Position Markings and Signs	☐Yes ☐No

V. Obstacle Clearance. Certification may be obtained from the airport sponsor.

A. Is the CAT II Obstacle Free Zone (OFZ) clear of obstructions?	☐Yes ☐No
B. If no, describe any obstacles that penetrate the CAT II OFZ:	
C. Approach Light Area:	
(1) Approach light plane clear:.....	☐Yes ☐No
(2) If light plane is not clear, describe any penetrations:	

VI. Electrical Power Requirements. (Ref. Order 6950.2 and AC 150/5340-30) Verify that the following components, if installed, meet the requirement for one second power transfer:

A. Threshold and Runway Edge Lights	☐Yes ☐No
B. Runway Centerline Lights	☐Yes ☐No ☐NA
C. Touchdown Zone Lights.....	☐Yes ☐No ☐NA
D. Approach Lights (if non-federal).....	☐Yes ☐No ☐NA

VII. <u>National Standards.</u> List all approved and planned modifications to airport national design standards regarding the proposed runway and equipment, including those related to facility frangibility.

Recommended By: (Print)	**Division, AXX-XXX**	**Signature**	**Date**

Manager, Airports Division (Print)	**Signature**	**Date**

AVN ILS Category Checklist

The designated ILS system has been selected for use to higher standards than a standard CAT I system. The attached checklist is designed to provide the appropriate organizations with the necessary information that will allow them to determine whether to grant or deny this higher service. We must confirm that all ground system and obstacle clearance requirements contained in FAA AC 120-29, appendix 2, and AC 120-28 are met.

The following blocks are graduated into increasing degrees of higher standards. All blocks previous to the requested standard must be completed.

- Block I, General Data.
- Block II, Special Authorization CAT I Operations (Latest version of FAA Order 8400.13, Chapter 3)
- Block III, Special Authorization CAT II Operations (Latest version of FAA Order 8400.13, Chapter 5).
- Block IV, CAT II Operations (Latest version of FAA Order 8200.1, Chapter 15).
- Block V, CAT III Operations (Latest version of FAA Order 8200.1, Chapter 15).

Completion of this checklist must reflect achieved/completed status - not planned actions. When all portions of this checklist are complete, the checklist will be forwarded to the appropriate Flight Standards All Weather Operations Program Manager via AVN-100 to preclude the delay of the requested service to the users.

Please provide the following information.

I.	**GENERAL DATA**	
A	Location:	
B	Airport:	
C	Runway Number:	
D	Facility ID:	
E	Runway Length (ft.) / Width (ft.):	/
F	Runway Gradient % +/-:	
G	Runway Surface Type:	
H	Runway Grooving:	
I	Glideslope Angle (degrees):	
J	Requested Standard (*II thru V*):	

II.	**Special Authorization CAT I Operations**	
A	Localizer #1 Performance Classification:	
B	Radio Altimeter Setting Height:	
C	Glideslope Clearance Below Path	☐Sat ☐Unsat
D	Missed Approach:	☐Sat ☐Unsat
E	MALSR or better:	☐Yes ☐No

III.	Special Authorization CAT II Operations	
A	Localizer #1 (CAT II/D Minimum):	
B	Localizer Performance Classification:	
C	Glideslope #1 (CAT II Criteria):	
D	Radio Altimeter Setting Height:	
E	RDH Crossing Height:	
F	ARDH Crossing Height:	
G	CAT II ILS SIAP:	☐Yes ☐No
H	Missed Approach:	☐Sat ☐Unsat
I	MALSR or better:	☐Yes ☐No

*NOTE: If dual transmitter, complete IVA & B below.

IV.	CAT II Tolerances Met	
A	Localizer #2 (CAT II/D Minimum):	
B	Glideslope #2 (CAT II Criteria):	
C	ALSF-2 Lights:	☐Yes ☐No

V.	CAT III Tolerances Met	
A	Localizer #1(CAT III/D or III/E Minimum):	☐III/D ☐III/E
B	Localizer #2(CAT III/D or III/E Minimum):	☐III/D ☐III/E
C	CAT III SIAP:	☐Yes ☐No

Remarks:

POSITION	*DATE*	*SIGNATURE*
Chief of Flight Inspection Activity		
Operations ILS Category Coordinator		

Appendix D. Sample Checklists for Evaluating Ground Facilities for CAT II and CAT III Operations

The basis of approval for airports having instrument landing system (ILS) ground facilities for Category (CAT) II and CAT III operations is contained in the following checklists.

Coordination of checklists will be accomplished by the assigned All Weather Operations Program Manager (AWOPM). Recommended checklists for Technical Operations, Terminal Services, Airports, and Aviation System Standards (AJW-33) are provided.

Pre-Checklist			
Coordinate the evaluation of the Type _____ equipment for Runway _____ at **AIRPORT** **CITY** **STATE** **to determine its capability to provide CAT II and/or CAT III approach and landing minimums.**			
Date requested:			
Requested by:			
Airport Manager's concurrence obtained ..... ☐Yes ☐No			
Post-Checklist			
Procedure was coordinated with the RAPT	☐Yes ☐No		
All checklists are signed and all discrepancies have been resolved.....	☐Yes ☐No		
CAT II/III flight inspection completed satisfactorily.....	☐Yes ☐No		
CAT II minimum:	**DH**	**HAT**	**RVR**
Approved for RVR 1000 Autoland or HUD Minima?.....	☐Yes ☐No		
CAT III minimum:	**DH**	**RVR**	
Comments:			
Target dates for attainment of Continuity of Service (CoS) and part 97 publication:			
CAT II CoS:		Target Publication Date:	
CAT III CoS:		Target Publication Date:	

All Weather Operations Program Manager (Print) **Signature** **Date**

COORDINATION WITH THE FOLLOWING OFFICES:

OFFICE	**PROVIDED**	**RETURNED**	**OK?**
Technical Operations:			
Discrepancies/Comments:			
Resolution:			
Terminal Services:			
Discrepancies/Comments:			
Resolution:			
Airports:			
Discrepancies/Comments:			
Resolution:			
AVIATION SYSTEM STANDARDS:			
Flight Inspection (AJW-33):			
Discrepancies/Comments:			
Resolution:			
Flight Procedures (AJW-32):			
Discrepancies/Comments:			
Resolution:			

Technical Operations Checklist for CAT II/III Operations

Runway: _____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to provide the required performance in support of the proposed CAT II/III approach and landing operations.

CAT II RVR 1600 (II/D/2):	☐Yes ☐No	CAT IIIa 700 RVR (III/D/3):	☐Yes ☐No
CAT II RVR 1200 (II/D/2):	☐Yes ☐No	CAT IIIb 600 RVR (III/E/3):	☐Yes ☐No
CAT II RVR 1000 (II/D/2):	☐Yes ☐No	CAT IIIb 300 RVR (III/E/4):	☐Yes ☐No

Confirm that all ground system requirements in Order 8400.13 applicable to Technical Operations are met. Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards All Weather Operations Program Manager (AWOPM) in order to preclude delay of CAT II/III service to the users. Once approval is granted, the Flight Standards will issue authorization for CAT II/III operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your CAT II/III coordinator for monitoring the accomplishment of your checklist.

AWOPM:	Phone Number:
Alternate:	Phone Number:

Please set monitor alarms to CAT II/III tolerances and initiate CoS.

II. General Data.

A. Facility ID:
B. Glideslope (GS) Angle: _____ degrees.
C. Published Threshold Crossing Height _____ feet.

III. ILS Systems. (Ref. AC 120-28, AC 120-29, and Order 6750.24.)

A. LOC and GS equipment and array type (e.g., Mark 20 and 14-element, capture-effect, etc.)	
LOC/array type:	
GS equipment type:	
Far Field Monitor installed: ..... ☐Yes ☐No	
B. Facility is certified for and capable of maintaining the required performance classification (Ref. Order 6750.24) ☐ II/D/2 ☐ III/D/3 ☐ III/E/3 ☐ III/E/4 ☐ No	
Facility certified and maintained to CAT II or CAT III ☐CAT II ☐CAT III ☐No	
CAT II/III Monitor Start Date	CAT II/III Flight Inspection Date

CoS Start Date.....	Estimated CoS Completion Date .....

Notify the Flight Standards AWOPM upon completion of CoS burn-in requirements.

C. Remote Status Monitors (LOC/GS) Installed (Ref. Order 6750.16)			☐Yes ☐No
Location(s):	LOC:	GS:	
D. Marker Beacons: (Ref Order 6750.16)			
Outer Marker installed (not required):			☐Yes ☐No
Middle Marker installed (not required):			☐Yes ☐No
Inner Marker installed: (for "RA NA" CAT II operations)			☐Yes ☐No
E. Approach Light System: installed (Ref. Order 6850.2):			☐Yes ☐No
Monitored (Ref Order 6750.24):			☐Yes ☐No
F. The localizer and glideslope critical areas are adequate to support CAT II/III operations:			☐Yes ☐No
Are the LOC and GS critical areas standard (Ref. Order 6750.16)?			☐Yes ☐No
If critical areas are non-standard, provide a description and attach critical area drawings:			

IV. Runway Visual Range Equipment. (Ref. Orders 6750.24 and 6560.10.)

A. Installed in accordance with AC 97-1 and Order 6560.29:	☐Yes ☐No
B. Type equipment (Make/Model):	
Touchdown installed:	☐Yes ☐No
Midpoint installed:	☐Yes ☐No
Rollout installed:	☐Yes ☐No
Far-End installed (not required):	☐Yes ☐No

V. Electrical Power Requirements. Indicate whether the following components meet CAT II/III standards for backup power and power transfer (Ref. Order 6950.2)

A. Localizer.....	☐Yes ☐No
B. Glideslope.....	☐Yes ☐No
C. Outer Marker	☐Yes ☐No ☐NA
D. Middle Marker	☐Yes ☐No ☐NA
E. Inner Marker.....	☐Yes ☐No ☐NA

F. RVR (Touchdown)	☐Yes ☐No
G. RVR (Midpoint).....	☐Yes ☐No ☐NA
H. RVR (Rollout).....	☐Yes ☐No ☐NA
I. ALSF-2	☐Yes ☐No

VI. Obstruction Clearance. Document review completed by the Flight Procedures Office to confirm the following NAVAIDs meet siting standards (Ref. Order 6750.16) and the interim TERPS requirements of AFS-400:

Localizer Antenna: ☐Yes ☐No	Glideslope Mast/Antenna: ☐Yes ☐No
Remarks:	

VI. Additional Information:

A. List all approved and pending National Airspace System (NAS) Change Proposals (NCP) applicable to the facilities in this checklist (ILS, approach lights, RVR, etc.).
B. Indicate the Tech Ops Systems Support Center and hours of coverage for qualified technicians on duty at the airport for this system:

Category II/III Coordinator (Print)	**Signature**	**Date**
Manager, Service Area Operations Engineering Group (Print)	**Signature**	**Date**

ATO Terminal Services Checklist for CAT II/III Operations

Runway: ____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to support the proposed CAT II/III approach and landing operations.

CAT II RVR 1600:	☐Yes ☐No	CAT IIIa RVR 700:	☐Yes ☐No
CAT II RVR 1200:	☐Yes ☐No	CAT IIIb RVR 600:	☐Yes ☐No
CAT II RVR 1000:	☐Yes ☐No	CAT IIIb RVR300:	☐Yes ☐No

Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards AWOPM in order to preclude delay of CAT II/III service to the users. Once approval is granted, the Flight Standards will issue authorization for CAT II/III operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your staff member/point of contact for monitoring the accomplishment of your checklist.

AWOPM:	Phone Number:
Alternate:	Phone Number:

II. Category II/III ILS Operational Requirements: (Ref. Order 7210.3)

A. LOA coordinated with the appropriate offices (i.e., Technical Operations, Airports Division/District Office, Flight Standards AWOPM, and Airport Authority). Please attach copy ..... ☐Yes ☐No

III. Monitor Capability and Coordination. (Ref. AC 120-28 and 120-29):

A. Verify that monitoring capability exists in the Air Traffic Control Tower (ATCT) for:
Localizer: ..... ☐Yes ☐No
Glideslope: ..... ☐Yes ☐No
Inner Marker (for RA NA operations): ..... ☐Yes ☐No ☐NA
B. Is an approved electrical monitoring system installed in the ATCT for the runway light system? ..... ☐Yes ☐No
C. Is an approved electrical monitoring system installed in the ATCT for the approach light system? ..... ☐Yes ☐No

IV. Power Transfer. (Ref. AC 120-28 and 120-29):

Arrangements exist to start engine generators for:
RVR: ..... ☐Yes ☐No ☐NA
Runway Lights (check all that apply): ..... ☐HIRL ☐TDZ ☐RCL ☐None

Approach light system and power vault (if ALSF installed) ..... ☐Yes ☐No

V. <u>Communications</u>:

A. Positive Control of Aircraft and Ground Vehicles on Runway and ILS Critical Areas (AC 120-28, paragraph 8; AC 150/5340-1; and Order 7110.65)..... ☐Yes ☐No
B. Indicate how facility outages and airport conditions (Order 7110.65 and 7210.3) are reported (ATIS, NOTAM, etc.) .....

Facility Air Traffic Manager (Print)	**Signature**	**Date**

Airports Division Checklist for CAT II Operations

Runway: _____ Airport: _____ City: _____ State: _____

This checklist is to verify that the equipment for the runway listed above meets the requirements to support the proposed CAT II/III approach and landing operations.

CAT II RVR 1600:	☐Yes ☐No	CAT IIIa RVR 700:	☐Yes ☐No
CAT II RVR 1200:	☐Yes ☐No	CAT IIIb RVR 600:	☐Yes ☐No
CAT II RVR 1000:	☐Yes ☐No	CAT IIIb RVR300:	☐Yes ☐No

Confirm that all ground systems and obstacle clearance requirements are met. Completion of this checklist must reflect achieved/completed status, not planned actions. When all portions of this checklist are complete, please return the checklist expeditiously to the Flight Standards AWOPM in order to preclude delay of CAT II/III service to the users. Once approval is granted, Flight Standards will issue authorization for CAT II/III operations.

I. General Information: Immediately upon initiation of this checklist, please provide the Flight Standards AWOPM (listed below) with the name and telephone number of your staff member/point of contact for monitoring the accomplishment of the checklist.

AWOPM:	Phone Number:
Alternate:	Phone Number:

II. Lighting Aids. Indicate if the following visual aids meet installation standards. If a modification to an airport design standard was approved, list each approval in section VII. (Ref. AC 150/5340-30 and Order 6850.2)

A. High Intensity Runway Edge Lights:..... ☐Yes ☐No
B. Threshold/Runway End Lights (in addition to threshold lights which are integral to the approach light system):..... ☐Yes ☐No
C. Runway Centerline Lights:..... ☐Yes ☐No
D. Runway Touchdown Zone Lights..... ☐Yes ☐No
E. ALSF-2 Approach Lights (if non-federal)..... ☐Yes ☐No
NOTE: For authorization less than RVR 1200, include a copy of the SMGCS plan and taxi chart with details of all required lighting aids (taxiway centerline lights, stop bars, etc.)

III. Monitoring of Lighting Aids.

A. Arrangements for airport personnel to advise ATCT whenever the runway lighting system does not meet CAT II/III requirements..... ☐Yes ☐No		
B. Specify the organization responsible for remote monitoring and visual inspection of lighting components. Enter "none" if not installed:		
Component	Remote Monitor	Visual Inspection
(1) Runway Edge Lights:		

(2) Runway Centerline Lights:		
(3) Runway Touchdown Zone Lights:		
(4) Approach Lights (if non-federal):		

IV. Surface Markings and Signs Installed. (Ref. AC 150/5340-1, AC 150/5340-18, Order 7110.65, and Order 6750.16)

A. Precision Instrument Runway Markings.....	☐Yes ☐No
B. Runway Holding Position Markings and Signs	☐Yes ☐No
C. CAT II/III ILS Critical Areas Identified. ILS Critical Area Holding Position Markings and Signs.....	☐Yes ☐No

V. Obstacle Clearance. Certification may be obtained from the airport sponsor.

A. Is the CAT II/III Obstacle Free Zone (OFZ) clear of obstructions? ..... ☐Yes ☐No
B. If no, describe any obstacles that penetrate the CAT II/III OFZ:
C. Approach Light Area:
(1) Approach light plane clear:..... ☐Yes ☐No
(2) If light plane is not clear, describe any penetrations:

VI. Electrical Power Requirements. (Ref. Order 6950.2) Verify that the following components, if installed, meet the requirement for one second power transfer:

A. Threshold and Runway Edge Lights..... ☐Yes ☐No
B. Runway Centerline Lights ..... ☐Yes ☐No
C. Touchdown Zone Lights ..... ☐Yes ☐No
D. Approach Lights (if non-federal) ..... ☐Yes ☐No

VII. <u>National Standards.</u> List all approved and planned modifications to airport national design standards regarding the proposed runway and equipment, including those related to facility frangibility.

Recommended By: (Print)	**Division, AXX-XXX**	**Signature**	**Date**
Manager, Airports Division (Print)		**Signature**	**Date**

AVN ILS Category Checklist

The designated ILS system has been selected for use to higher standards than a standard CAT I system. The attached checklist is designed to provide the appropriate organizations with the necessary information that will allow them to determine whether to grant or deny this higher service. We must confirm that all ground system and obstacle clearance requirements contained in FAA AC 120-29, appendix 2, and AC 120-28 are met.

The following blocks are graduated into increasing degrees of higher standards. All blocks previous to the requested standard must be completed.

- Block I, General Data.
- Block II, Special Authorization CAT I Operations (Latest version of FAA Order 8400.13, chapter 3).
- Block III, Special Authorization CAT II Operations (Latest version of FAA Order 8400.13, chapter 5).
- Block IV, CAT II Operations (Latest version of FAA Order 8200.1, chapter 15).
- Block V, CAT III Operations (Latest version of FAA Order 8200.1, chapter 15).

Completion of this checklist must reflect achieved/completed status - not planned actions. When all portions of this checklist are complete, the checklist will be forwarded to the appropriate Flight Standards All Weather Operations Program Manager via AVN-100 to preclude the delay of the requested service to the users.

Please provide the following information.

I.	**GENERAL DATA**	
A	Location:	
B	Airport:	
C	Runway Number:	
D	Facility ID:	
E	Runway Length (ft.) / Width (ft.):	/
F	Runway Gradient % +/-:	
G	Runway Surface Type:	
H	Runway Grooving:	
I	Glideslope Angle (degrees):	
J	Requested Standard (*II thru V*):	

II.	Special Authorization CAT I Operations	
A	Localizer #1 Performance Classification:	
B	Radio Altimeter Setting Height:	
C	Glideslope Clearance Below Path:	☐ Sat ☐ Unsat
D	Missed Approach:	☐ Sat ☐ Unsat
E	MALSR or better:	☐ Yes ☐ No

III.	Special Authorization CAT II Operations	
A	Localizer #1(CAT II/D Minimum):	
B	Localizer Performance Classification:	
C	Glideslope #1 (CAT II Criteria):	
D	Radio Altimeter Setting Height:	
E	RDH Crossing Height:	
F	ARDH Crossing Height:	
G	CAT II ILS SIAP:	☐Yes ☐No
H	Missed Approach:	☐Sat ☐Unsat
I	MALSR or better:	☐Yes ☐No

*NOTE: If dual transmitter, complete IVA & B below.

IV.	**CAT II Tolerances Met**	
A	Localizer #2 (CAT II/D Minimum):	
B	Glideslope #2 (CAT II Criteria):	
C	ALSF-2 Lights:	☐Yes ☐No

V.	**CAT III Tolerances Met**	
A	Localizer #1(CAT III/D or III/E Minimum):	☐III/D ☐III/E
B	Localizer #2(CAT III/D or III/E Minimum):	☐III/D ☐III/E
C	CAT III SIAP:	☐Yes ☐No

Remarks:

POSITION	***DATE***	***SIGNATURE***
Chief of Flight Inspection Activity		
Operations ILS Category Coordinator		