U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER 8400.13C

National Policy

Effective Date:
11/03/08

SUBJ: Procedures for Category I Approach Operations at 1800 RVR and Approval of Special Authorization for Category II Approach Operations on Type I ILS

1. Purpose of this Order. This order has two purposes. First, regarding Category (CAT) I instrument approaches using a Runway Visual Range (RVR) minimum of 1800, this order implements new Federal Aviation Administration (FAA) policy and harmonizes the operational policies between the FAA and the European Joint Aviation Authority (JAA). Second, regarding CAT II approach operations, this order informs agency personnel of special authorization requirements for approval to runways which do not meet the performance or equipment requirements of a U.S. Standard or International Civil Aviation Organization (ICAO) Standard (e.g., touchdown zone (TDZ) lighting, centerline (CL) lighting, CAT II approach lighting system with sequenced flashing lights (ALSF-2), far field monitors, dual Localizer (LOC) and glideslope transmitters, or CAT II LOC certification).

2. Audience. The audience for this order is FAA personnel, concerning CAT I instrument approaches using an RVR minimum of 1800 and CAT II approach operations regarding special authorization requirements for approval to runways which do not meet the performance requirements of a U.S. or ICAO standard.

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. Cancellation. This order cancels Order 8400.13B, Procedures for the Approval of Special Authorization CAT II and Lowest Standard Category I Operations, dated February 15, 2005.

5. Explanation of Changes. This revision allows CAT I operations with RVR of 1800 to runways that do not have TDZ or CL lighting when the approach is flown to Decision Altitude (DA) using either a flight director (FD), autopilot (AP) with an approach coupler, or a head-up display (HUD). The checklists in Appendix B have also been updated in addition to editorial changes to clarify information. For a list of authorized CAT II airport runways 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. History. In the United States and internationally, ground navigation equipment was typically designated to correlate with a specific operation. For example, in ICAO Annex 10, a Facility Performance CAT II instrument landing system (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. Improved Avionics. The higher performance capabilities of new and improved avionics have mitigated some of the performance requirements of the ground-based navigation equipment. Realizing the change of circumstances, the term “type” was introduced to designate performance of ground navigation equipment and more accurately describe the association between the performance requirements of ground navigation equipment and airborne navigation equipment. Also, designating ground navigation equipment with the type designation, to some degree, eliminates the confusion caused when approving an airborne operation (e.g., CAT II) on a ground facility that does not match the operational performance (e.g., CAT II operation on a Type I ILS vs. CAT II operation on a CAT II ILS).

c. Performance Standards. Ground equipment hardware which does not meet CAT II performance standards, that may have previously prevented certain airborne operations, may now be used for those same operations when the aircraft and avionic capabilities, crew training, and other factors mitigate the ground equipment performance deficits.

7. CAT I 1800 RVR Approach Operations.

a. Harmonization. In 1995, the European JAA authorized 550 meters (1800 RVR) as a base visibility on ILS without the requirement for TDZ/CL lights. Recent harmonization efforts resulted in an FAA/JAA agreement that ILS operations with 1800 RVR do not require TDZ/CL lights if the operator employs the use of an aircraft FD, AP with an approach coupler, or a HUD to DA.

b. Scope. CAT I approaches with 200 feet decision height (DH), 1800 RVR minimums, using an aircraft FD or AP with an approach coupler or HUD, in lieu of runway TDZ lighting and CL lighting, on Type I ILS facilities are authorized by this order.

c. Requirements.

(1) To be eligible for CAT I approaches at 1800 RVR, 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 has restrictions, it must be approved by the Flight Technologies and Procedures Division (AFS-400) in coordination with the Flight Inspections Operations Group (AJW-33) on a case by case basis.

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

(3) Single pilot operators are prohibited from using the FD to reduced CAT I landing minimums without accompanying use of an AP with an approach coupler or HUD.

(4) Required runway lighting and ancillary equipment:

(a) 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).

(b) High Intensity Runway Lights (HIRL).

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

(5) Instrument Approach Procedure (IAP).

(a) Any existing part 97 CAT I SIAP which did not qualify for 1800 RVR due to the absence of TDZ or CL lighting can be amended to include 1800 RVR visibility. When the straight-in ILS minimum is approved for 1800 RVR, use: "Chart Note: RVR 1800 Authorized with use of FD or AP or HUD to DA" referenced to the straight-in ILS minimum.

(b) Aircraft equipped with an operable FD, or AP with an approach coupler, or HUD which is certified for operation to a minimum of 200 feet HAT are eligible for this operation.

8. CAT II 1600 RVR or 1200 RVR Approach Operations.

a. Scope. CAT II approaches with 100 feet DH, 1600 RVR, or 1200 RVR minimums using aircraft autoland or HUD certified to touchdown, in lieu of dual LOC and glideslope transmitters, runway TDZ, CL, and ALSF-2 lighting systems are authorized by this order.

b. Required Runway Lighting and Ancillary Equipment. To be eligible for CAT II operations at 1600 RVR or 1200 RVR, runways must have, or be qualified for, a part 97 SIAP with a CAT I minimum of 200 feet DH and a visibility minimum not more than 2400 RVR, with at least the following ancillary components:

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

(2) HIRL, and

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

c. Instrument Landing System.

(1) The ILS must meet all requirements of a CAT II ILS facility except for the items specifically identified as not required by this order.

(2) If the ILS 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 to not less than performance classification II/D/3, and the localizer must perform to CAT III standards to point D. Compared to a normal CAT I ILS ground facility, candidate sites must have their shutdown delay times and monitor alarm limits maintained to CAT II tolerances. Single transmitter facilities are acceptable provided they meet the level 3, Mean Time Between Outages

(MTBO), performance requirements contained in the current edition of Order 6750.24, Instrument Landing System and Ancillary Electronic Component Configuration and Performance Requirements, and Order JO 6750.57, Instrument Landing System Continuity of Service Requirements and Procedures.

(3) The ILS critical areas must be maintained in order to provide CAT III beam quality to ILS point D, a point 3,000 feet down the runway from the threshold toward the LOC. Critical areas associated with 8-element antenna arrays are larger than those associated with 14-element arrays and the current edition of Order 6750.16, Siting Criteria for Instrument Landing Systems, defines LOC and glideslope critical area sizes. Additionally, in accordance with (IAW) Order 6750.24, operational constraints may be used to accommodate excessively large critical areas.

(4) Runway lighting systems must have standby power with a one second transfer and must be visually or remotely monitored so that aircraft can be notified immediately if they become inoperative. An alternative where none of these is 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.

(5) The approach lighting system must be monitored remotely or visually. When the approach lighting system is visually monitored, it must be visually inspected prior to beginning CAT II operations, and every two hours thereafter, until CAT II operations are terminated. The person performing the visual monitoring must immediately notify the controlling ATC element when any abnormality occurs.

(6) The LOC and glideslope, and inner marker (if operationally required) 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 (GS) is turned off by the executive integrity monitor.

(7) A LOC far field monitor is not required.

d. Instrument Approach Procedure.

(1) Aviation System Standards develops these procedures IAW the standard Terminal Instrument Procedures (TERPS) CAT II development criteria and process as a part 97 SIAP. In addition to the standard CAT II note: “Special aircrew and aircraft certification required,” include the following note: “Procedure does not meet ICAO standard for ALSF/TDZ/CL lighting systems. Requires specific OPSPEC, MSPEC, or LOA approval. Requires Autoland or HUD to touchdown.”

(2) Only those 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.

9. Operational Approval.

a. General.

(1) CAT I operations to 1800 RVR will be added to existing SIAPS IAW a schedule established by the Regional Airspace and Procedures Team (RAPT). CAT II operations to 1600 or 1200 RVR on a Type I ILS requires the publication of a new part 97 ILS SIAP.

(2) Candidate runways and the associated facilities must be evaluated, and approved by the All Weather Operations Program Manager (AWOPM) to ensure acceptability for lower minimums. If appropriate, conduct these evaluations IAW the criteria contained herein and in the checklist in Appendix B. Completion of the checklists in Appendix B is not required for CAT I operations to 1800 RVR.

(3) Approved standard CAT II and III facilities are also authorized for CAT II operations if authorized in the operator's operations specifications (OpSpec), management specifications (MSpec), or letter of authorization (LOA).

b. CAT I Operations to 1800 RVR.

(1) Completion of the checklists in Appendix B is *not* required.

(2) When 1800 RVR operations are authorized it will be documented on the applicable FAA Form 8260-3 and in the applicable OpSpec, MSpec, or LOA. Individual SIAPs become available to approved operators by amending the part 97 CAT I SIAP.

(3) The OpSpec, MSpec, or LOA must also include the special limitation requiring the use of aircraft FD, AP, or HUD equipment to DA (i.e., 200 HAT).

Note: Single pilot operators are prohibited from using the FD to reduced CAT I landing minimums without accompanying use of an AP with an approach coupler or HUD.

c. Special Authorization CAT II Operations to 1600 or 1200 RVR.

(1) Requests for special authorization CAT II SIAPs for a specific runway can be initiated by any operator or organization.

(2) Confirmation of all items on the checklists is at the discretion of the regional AWOPM.

(3) Airport sponsor involvement (letter of concurrence) *is* required and must be submitted through the appropriate Airport District Office (ADO). 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.

(4) To mitigate the absence of runway TDZ, CL, and ALSF-2 lighting systems, the operator must use autoland or HUD certified to touchdown as a condition of the minimum.

(5) 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 3 integrity, continuity, and MTBO requirements. (For classification system ratings, see Order 6750.24, Order JO 6750.57, or ICAO Annex 10.)

(6) 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).

(7) 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.

(8) Appropriate training to accomplish this special authorization CAT II operation is required. Special emphasis needs to be placed on autoland and/or HUD operations to touchdown, as well as, the absence of runway TDZ, CL, and ALSF-2 lighting systems.

(9) This operation cannot be promulgated as an ICAO operational performance CAT II due to the lack of runway TDZ and CL and ALSF-2 lighting systems, as required by Annex 14. However, with those exceptions, the ILS and ancillary components support CAT II operations and any failures that would normally downgrade the system, based on directive requirements such as Order 6750.24, etc., must be acted on IAW the standard procedures in effect for any CAT II authorization.

10. Responsibilities.

a. Regional Flight Standards Division. The AWOPM will coordinate the procedure request with the RAPT. The AWOPM, having geographic responsibility for the area where the candidate airport is located, will review 1800 RVR proponent documentation and confirm the facility's compliance with this order. The AWOPM will also be responsible for the distribution, collection, review, and approval of the CAT II checklists for completeness and required data, and maintenance of the regional list of approved locations authorized for CAT II on Type I facilities. The AWOPM will notify AFS-400, Flight Technology and Procedures Division, to update the 8400.13 Web site list, whenever applicable 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 an OpSpec, MSpec, or LOA.

b. RAPT. The RAPT evaluates and sets the priority for the procedure development IAW Order 8260.43, Flight Procedures Management Program.

c. Technical Operations. Completes evaluation checklist to allow assessment of runways for CAT II operations. To support implementation of CAT II operations ensures LOC and glideslope beam performance, monitoring limits, and shutdown delays are maintained to CAT II tolerances and critical area boundaries are defined to protect CAT III autoland operations to point D. Where ILS remote status monitoring capability (for LOC, GS, and marker beacons, if applicable) is not provided or is inoperative, ensures visual monitoring is accomplished and immediate notification of status changes to the controlling ATC element is provided.

d. ATO Service Center. Completes evaluation checklist to assess runways for CAT II operations, including protection of the localizer critical area for CAT III autoland operations. Supporting the implementation of CAT II operations ensures that applicable CAT II ILS 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. Particular attention must be given to operations planned to runways utilizing an 8-element antenna array, as the ILS critical area will be quite large. Upon failure of runway and approach lighting systems (whether notified by remote status monitoring capability or visual inspections), establishes procedures to advise pilots of a HIRL or approach lighting system failure.

e. Regional Airports Division. Completes evaluation checklist to assess runways for CAT II operations. Coordinates with airport operators to evaluate applicability of CAT II requirements such as lights, signs, markings, etc.

f. Aviation System Standards (AJW-3).

(1) The National Flight Procedures Office (NFPO). Supports implementation of CAT II operations by participating in the RAPT through the Flight Procedures Office (FPO). The NFPO amends the current CAT I procedure to include 1800 RVR and/or develops the CAT II procedure IAW the guidelines established by this order. The procedure will be amended by the NFPO IAW the priority established by the regional RAPT.

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

(a) CAT I Operations to 1800 RVR. 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 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, United States Standard Flight Inspection Manual.

(b) Special Authorization CAT II Operations to 1600 or 1200 RVR. Certify that the ILS conforms to the applicable flight inspection related performance requirements stated in paragraph 8c(2) 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 Notices to Airmen (NOTAM), if the ILS facility or other required equipment fails to meet its performance requirements IAW the standard CAT II criteria in Order 8200.1. Also, completes evaluation checklist to allow assessment of runways for CAT II operations.

g. Airport.

(1) The airport establishes markings and signs, and removes obstructions as necessary, to support CAT II ILS Operations. The airport layout plan will be amended by the airport when necessary.

(2) 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.

11. Explanation of Appendices.

a. Appendix A. Contains a listing of relevant advisory circulars (AC) and FAA Orders.

b. Appendix B. Contains a set of checklists for use by Airway Facilities, Air Traffic, Airports, Aviation System Standards, and Flight Standards personnel to evaluate potential for CAT II operations at airports that have Type I ILS ground facilities.

12. Disposition. We will permanently incorporate the information in this order in FSIMS before this order expires. Direct questions or comments regarding minimum reduction for operations conducted with properly equipped aircraft to the Flight Operations Branch, AFS-410.

Directive Feedback. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this order on 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 follow-up to verbal conversation.

ORIGINAL SIGNED by

James J. Ballough
Director, Flight Standards Service

Appendix A. References (current editions)

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 6750.16, Siting Criteria for Instrument Landing Systems.

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

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

12. FAA Order 6850.2, Visual Guidance Lighting Systems.

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

14. FAA Order 7110.65, Air Traffic Control.

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

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

17. FAA Order 8260.19, Flight Procedures and Airspace.

18. FAA Order 8260.43, Flight Procedures Management Program.

19. FAA Order 8400.8, Procedures for Approval of Facilities for FAR Part 121 and Part 135 CAT III Operations.

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

21. ICAO Annex 10, Aeronautical Telecommunications.

Appendix B. Recommended Checklists for Evaluating Type I Facilities for CAT II Operations

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

Coordination of checklists will be accomplished by the controlling regions All Weather Operations Program Manager (AWOPM). Recommended checklists for Airway Facilities, Air Traffic, Airports, and Aviation System Standards (AJW)-33 are provided.

FLIGHT STANDARDS

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) _____

Post-Checklist

All checklists are attached and all discrepancies have been resolved..... (yes/no) _____

Procedure was coordinated with the RAPT ..... (yes/no) _____

Recommended minimum: DH_____ MSL _____ HAT _____ RVR _____

Comments: _____

_____

_____

_____ _____/_____/_____

All Weather Operations Program Manager **Date**

COORDINATION WITH THE FOLLOWING OFFICES:

DATE			
OFFICE	**PROVIDED**	**RETURNED**	**OK?**
AIRWAY FACILITIES:	_____ / _____/_____	_____ / _____/ ____	_____
Discrepancies:			
Resolution:			
AIR TRAFFIC:	_____ / _____/_____	_____ / _____/ ____	_____
Discrepancies:			
Resolution:			
AIRPORTS:	_____ / _____/_____	_____ / _____/ ____	_____
Discrepancies:			
Resolution:			

AVIATION SYSTEM STANDARDS:

AJW-33 (Flight Inspection):	_____ / _____/_____	_____ / _____/ ____	_____
Discrepancies:			
Resolution:			

Technical Operations Checklist for CAT II Operations

Equipment for _____ Airport, Runway _____ is installed with capability to provide Class II/D/3 performance in support of CAT II approach and landing minimums.

Confirm that all ground system requirements (applicable to those Federal Aviation Administration (FAA) ground systems maintained by Airway Facilities) contained in AC 120-29 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 regional All Weather Operations Program Manager (AWOPM) in order to preclude delay of CAT II service to the users. Once approval is granted, the regional Flight Standards Division will issue authorization for CAT II operations.

Immediately upon initiation of this checklist, please provide the regional AWOPM with the name and telephone number of your CAT II coordinator for monitoring the accomplishment of your checklist.

I. General Data.

A. Glide Slope (GS) Angle:_____._____ degrees.

B. Published Threshold Crossing Height _____ feet.

C. National Airspace System (NAS) Change Proposals (NCP). List all approved and pending NCPs applicable to the facilities in this checklist (ILS, approach lights, RVR, etc.).

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

A. Localizer (LOC) and array type, e.g., 8-element, 14-element, etc./GS equipment installed, e.g., "Manf. name" Mk 1F.

LOC/array type _____

(Type)

GS:_____

(Type)

Far Field Monitor installed: (not required)..... (yes/no)_____

B. Performance Classification of at least Class II/D/3 (Ref Order 6750.24)
Facility certified and maintained to CAT II ..... (yes/no)_____

CAT III localizer performance certified and maintained to point D..... (yes/no)_____

CAT II glideslope performance certified and maintained to point T..... (yes/no)_____

Integrity/continuity rated and maintained at Level 3..... (yes/no)_____

C. Remote Status Monitors (LOC/GS) (Ref Order 6750.16)..... (yes/no)_____

D. Marker Beacons: (Ref Order 6750.16)
Outer Marker or facility providing final approach fix installed: .... (yes/no)_____

Monitored ..... (yes/no)_____

Inner Marker: (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)_____

III. 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 FAA (yes/no)_____

Standard-008 __

Type equipment: _____

(Make/Model)

Touchdown installed: ..... (yes/no)_____

Midpoint installed: ..... (yes/no)_____

Rollout installed: ..... (yes/no)_____

IV. Electrical Power Requirements. (Ref Order 6950.2)

Component	Power Source Code	
Localizer	D*	(yes/no)_____
Glide Slope.....	D*	(yes/no)_____
Outer Marker.....	D*	(yes/no)_____
Middle Marker	D*	(yes/no)_____
RVR (Touchdown).....	D*	(yes/no)_____
RVR (Midpoint).....	D*	(yes/no)_____
RVR (Rollout).....	D*	(yes/no)_____

NOTE: *--Requires uninterrupted transfer

#--Requires one (1) second transfer

_____ ____/____ / ____

Manager, Airway Facilities System Management Office (SMO) Date

_____ ____/____ / ____

CAT II Coordinator Date

_____ ____/____ / ____

Manager, Technical Operations Date

ATO Terminal Services Checklist for CAT II Operations

Equipment for _____ Airport, Runway_____is installed with capability to provide Class II/D/3 performance in support of CAT II approach and landing minimums.

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 regional AWOPM in order to preclude delay of CAT II service to the users. Once approval is granted, the regional Flight Standards Division will issue authorization for CAT II operations.

Immediately upon initiation of this checklist, please provide the regional AWOPM with the name and telephone number of your CAT II coordinator for monitoring the accomplishment of your checklist.

I. Monitor Capability. (Ref AC 120-29):

Verify that monitoring capability exists in the Air Traffic Control Tower (ATCT) for:

Localizer: ..... (yes/no) _____

Glide Slope: ..... (yes/no) _____

Outer Marker/Facility providing final approach fix: ..... (yes/no) _____

RVR: ..... (yes/no) _____

Runway Lights (Edge): ..... (yes/no) _____

II. Coordination. (Ref AC 120-29):

A. Arrangements exist for airport personnel to advise ATCT whenever the runway lighting system does not meet CAT II requirements ..... (yes/no) _____

B. Arrangements exist to start engine generators at Approach Light System and power vault, or an approved electrical monitoring system installed in the ATCT, or a visual monitoring program approved by the FAA ..... (yes/no) _____

C. Arrangements exist for airport personnel to advise the ATC when approach lights fail ..... (yes/no) _____

III. Communications. (Ref Order 7110.65):

A. Positive Control of Aircraft and Ground Vehicles on Runway ..... (yes/no) _____

B. ILS Critical Areas defined and protected (AC 150/5340-1 and Order 7110.65) ... (yes/no) _____

C. Facility Outages/Airport Conditions (Order 7110.65) reported by Voice or Notices to Airmen (NOTAM)..... (yes/no) _____

_____ ___/___ /___

CAT II Coordinator/Support Manager, ATCT Date

_____ ___/___ /___

Facility Air Traffic Manager Date

Airports Division Checklist for CAT II Operations

Equipment for _____ Airport, Runway _____ is installed with capability to provide CAT II approach and landing minimums.

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 regional AWOPM in order to preclude delay of CAT II service to the users. Once approval is granted, the regional Flight Standards Division will issue authorization for CAT II operations.

Immediately upon initiation of this checklist, please provide the regional AWOPM with the name and telephone number of your CAT II coordinator for monitoring the accomplishment of the checklist.

I. Lighting Equipment Installed.

A. High Intensity Runway Edge Lights (Ref AC 150/5340-30C, Design and Installation Details for Airport Visual Aids): ..... (yes/no)_____

B. Threshold/Runway End Lights (in addition to threshold lights which are integral to the approach light system) (Ref AC 150/5340-30C):..... (yes/no)_____

C. Runway Centerline Lights (not required) (Ref AC 150/5340-30C):. (yes/no)_____

D. Runway Touchdown Zone Lights (not required) (Ref AC 150/5340-30C) ..... (yes/no)_____

E. Approach Lights (MALSR, SSALR, or ALSF-1/2) (Ref AC 150/5340-30C) ..... (yes/no)_____

II. 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 whether each of the following lighting aids, if installed, are remotely monitored or visually inspected.

	(if installed)	
(1) Runway Edge Lights:	[ ] remotely monitored;	[ ] visually inspected.
(2) Runway Centerline Lights:	[ ] remotely monitored	[ ] visually inspected.
(3) Runway Touchdown Zone Lights:	[ ] remotely monitored	[ ] visually inspected.
(4) Approach Lights (if non-federal):	[ ] remotely monitored	[ ] visually inspected

III. Surface Markings and Signs Installed.

A. Precision Instrument Runway Markings. (Ref AC 150/5340-1)..... (yes/no)_____

B. Runway Holding Position Markings and Signs.
(Ref AC 150/5340-1 and AC 150/5340-18)..... (yes/no)_____

C. CAT II and touchdown zone ILS Critical Areas Identified. ILS Critical Area Holding Position Markings and Signs (Ref Order 6750.16, AC 150/5340-1, Order 7110.65, and AC 150/5340-18)
..... (yes/no)_____

IV. Surface Penetrations. Certification may be obtained from the airport sponsor.

A. Describe any penetrations of these 14 CFR part 77 surfaces:

(1) The 50:1 surface out to 10,000 ft.:

_____

_____

(2) The 34:1 surface out to 10,000 ft.:

_____

_____

(3) The 7:1 transitional surfaces:

_____

(4) CAT II/III Missed Approach Surface:

_____

B. Approach Light Area:

(1) Light lane clear:..... (yes/no) _____
(2) If light lane is not clear, describe any penetrations of the 50:1 surface:

_____

_____

C. "Standard" Runway Safety Area. Clear of objects not required for ILS CAT II or fixed by their functional purpose. (Ref Order 5200.8) ..... (yes/no) _____

D. Touchdown Area Transitional Surfaces. Describe any penetrations of the 7:1 transitional surfaces:_____

V. Electrical Power Requirements. (Ref Order 6950.2) Verify that the following power source code requirements are met, if installed:

Component	Power Source Code	
Threshold and Runway Edge Lights	D#	(yes/no) _____
Runway Centerline Lights	D#	(yes/no) _____
Touchdown Zone Lights	D#	(yes/no) _____
Approach Lights (if non-federal)	D#(not req'd)	(yes/no) _____

 # = Requires one (1) second transfer.

VI. National Standards. List all approved and planned modifications to airport national design standards regarding the proposed runway.

_____

_____

_____ _____ ____ / ____ / ___

Manager, _____ Airports District Office (Division), AXX-XXX Date

_____ ____/_____ / ___

CAT II Coordinator Date

_____ ____/_____ / ___

Manager, Airports Division 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 CAT II Operations to 1600 or 1200 RVR (Latest version of FAA Order 8400.13, Paragraphs 8b and c)
- Block III, CAT II Operations (Latest version of FAA Order 8200.1, Chapter 15)
- Block IV, 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 Procedures Office via AVN-100 to preclude the delay of the requested service to the users. Once approval is granted, AFS-410 will issue authorization for the appropriate operations.

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	Glide Slope Angle (degrees):	
J	Requested Standard (*II thru IV*):	

II.	CAT II Operations 1600/1200 RVR on CAT I		
		YES	NO
A	Localizer #1(CAT II/D Minimum):		
B	Localizer Performance Classification:		
C	Glide Slope #1 (CAT II Criteria):		
D	Radio Altimeter Setting Height:		
E	RDH Crossing Height:		
F	ARDH Crossing Height:		
G	CAT II ILS SIAP:		
H	Missed Approach:		
I	MALSR or better:		

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

III.	CAT II Tolerances Met		
		YES	NO
A	Localizer #2(CAT II/D Minimum):		
B	Glide Slope #2 (CAT II Criteria):		
C	ALSF-2 Lights:		

IV.	CAT III Tolerances Met		
		YES	NO
A	Localizer #1(CAT III/E Minimum):		
B	Localizer #2(CAT III/E Minimum):		
C	CAT III SIAP:		

Remarks:

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