



CHAPTER 39

OPERATOR AIRCREW AND AIRCRAFT APPROVAL FOR REDUCED VISIBILITY FLIGHT OPERATIONS INCLUDING CATEGORY II AND III OPERATIONS

1.0 PURPOSE

This document provides guidance for all Flight Operations Inspectors and other assigned aviation safety inspectors who oversee and authorize operators to conduct reduced visibility flight operations, including instrument landing system (ILS) Category II/III (CAT II/III) operations in accordance with **Nig. CARs 8.4.1.7, 8.8.1.7, 8.8.1.8, 8.8.1.9, 8.8.1.10 and 8.10.1.31**

The document entitles Aircrew and Aircraft Approval for Reduced Visibility Flight Operations, including CATII/III Operations describes the evaluation and approval process to be used by Flight Operations Inspectors when evaluating CATII/CATIII applications.

2.0 ACTION

- a. Flight Operations Inspectors should provide this document to their respective operators when information is requested regarding the application, evaluation and approval process required by the NCAA for ILS CATII/III programs
- b. Flight Operations Inspectors should become familiar with the document and adhere to the prescribed evaluation process as closely as possible to insure applications are processed in a standardized manner and with the requisite depth and detail.

NOTE: Reference has been made throughout this document to FAA Advisory Circular material. This will continue to be used even after the NCAA has published its own advisory documentation.

3.0 BACKGROUND

- 3.1 OBJECTIVE.** The objective of this task is to evaluate an operator's ability to conduct instrument landing system (ILS) Category (CAT) I, II, and/or III approach operations, as applicable.

4.0 APPLICABILITY

- a. **Purpose.** The purpose of this task is to provide operational system safety oversight, analysis, and guidance to inspectors on the authorization of operators to conduct ILS approach operations. The Flight operations inspector (FOI) authorizes the ILS CAT I operation via the issuance of an operations specification (OpSpec). ILS CAT II and III approval, also through OpSpecs. This process applies to all Nigerian operators who pursue NCAA CAT II/III operational approval.
- b. **Process.** The general process of approval or acceptance of certain operations, programs, documents, procedures, methods, or systems is an orderly method used by Flight Operations Inspectors to ensure that such items meet regulatory standards and provide for safe operating practices. It is a modular, generic process that is ideally suited for the approval of CAT II and III



programs that are solicited by operators from the NCAA. The process consists of five distinct yet related phases and can result in approving or not approving an operator's CAT II and/or CAT III application. It is important for an inspector to understand that the process described in this chapter is not all-inclusive, but rather a tool to be used with good judgment in conducting day-to-day duties and responsibilities.

- c. **Phase One.** The first phase starts when an operator inquires about the requirements necessary for achieving CAT II and/or III certification. During initial inquiries, it is important for the operator to become familiar with the subject matter. An excellent means of accomplishing this is for the operator to be required to submit a compliance statement that addresses every pertinent section of the appropriate CAT II or CAT III AC. The contents and structure of the compliance statement will be specifically covered in Appendix 1 of this chapter

NOTE: It is essential (particularly in phase one) for the operator to have a clear understanding that, although the inspector may provide advice and guidance to the operator, the development of the final product submitted to the NCAA is solely the responsibility of the operator.

- (1) In phase one, the inspector must ensure that the operator clearly understands the form, content, and documents required for the CAT II and/or CAT III submission to be acceptable to the NCAA. The operator must be informed of the need and benefits of submitting required documents as early as possible and of its responsibility to advise the NCAA in a timely manner, of any significant changes in the proposal.
- (2) Phase one of the process is illustrated as follows:
 - Operator makes inquiry or request to NCAA about CAT II and/or CAT III certification
 - NCAA advises operator of required CAT II and/or CAT III application requirements and documentation.
 - NCAA and operator develop understanding of subject area
 - Operator understands form, content, and documents required for acceptable CAT II and/or CAT III submission.

- d. **Phase Two.** Phase two begins when the operator formally submits a CAT II and/or III application for NCAA evaluation.

- (1) The inspector's first action, in phase two, is to evaluate the operator's submission to ensure that the proposal is clearly defined, and the documentation specified in phase one has been provided. The required information must be complete and detailed enough to permit a thorough evaluation of the operator's capability and competence to fully satisfy the applicable regulations, and safe operating practices required to conduct CAT II/III operations.
- (2) Phase two does not include a detailed operational and technical evaluation or analysis of the submitted information (see phase three). However, in phase two the submission must be examined in sufficient detail to assess the completeness of the required information. If the operator's submission is not complete or the quality is obviously unacceptable, it must be returned immediately with an explanation of the deficiencies, before any further review and evaluation is conducted. Normally, unacceptable submissions should be returned with a written explanation of the reasons for its return. In complex cases, a meeting with the operator and its key personnel may be necessary to resolve issues and agree on a mutually acceptable solution. If mutual agreements cannot be reached, the inspector must terminate the meeting, inform the operator that the submission is unacceptable, and return the submission. If all parties are able to reach agreement on measures to correct omissions or deficiencies, and the principal inspectors (operations, airworthiness, and avionics, if



applicable) determine that the submission is acceptable, the operator will be so informed, and phase three begins.

(3) Phase two of the process is illustrated as follows:

- (a) Operator submits application;
- (b) NCAA makes initial examination of the documents for completeness with respect to requirements established in phase one;
- (c) NCAA returns submitted application; or
- (d) NCAA accepts submitted application.

NOTE: It is important for the inspector involved to keep the operator advised of the status of its proposal. If the inspector takes no other action, or if the submission is deficient and not returned in a timely manner, the applicant may assume that the NCAA has tacitly accepted the submission and is continuing with the process.

e. **Phase Three.** Phase three is the NCAA's detailed analysis, review, and evaluation of the operator's proposal. These actions may take place within NCAA's offices, at the operator's facilities, or at a combination of all these locations.

- (1) In phase three, the NCAA evaluation is focused on the form, content, and technical quality of the submitted application to determine that the information in the proposal meets the following criteria:
 - a) Is not contrary to any applicable regulations
 - b) Is not contrary to the direction provided in this document or other safety-related documents
 - c) Provides for safe operating practices
- (2) Criteria for evaluating the formal application is found in paragraph 5.0 (Procedures) of this chapter, and follows the general guidance contained in the CAT II/III Job Aid. The inspector must ensure that the documents adequately establish the operator's capability and competence to safely conduct CAT II/III operations in accordance with the submitted application.
- (3) During phase three the NCAA inspector must, in a timely manner, address any deficiencies in the submitted material before proceeding to subsequent phases. Discussion with the operator may be sufficient to resolve certain discrepancies or questions or to obtain additional information. It may be necessary to return certain sections of the submission to the operator for specific changes. However, when an inspector determines that, for specific reasons, the material is grossly deficient or unacceptable, the inspector must return the entire submission to the operator with an appropriate explanation and immediately terminate this phase.
- (4) An important aspect of phase three is for NCAA inspectors to begin planning the conduct of phase four. While evaluating the operator's formal submission, inspectors should begin to formulate plans to observe and evaluate the operator's ability to demonstrate their ability to conduct CAT II/III operations. These plans must be finalized before the actual demonstrations. Phase three shall require that the NCAA approve certain programs before conducting actual line operations in phase four. For example, in phase three the operator initiates NCAA-Approved CAT II/III training and must have the avionics and airworthiness programs approved before conducting actual line operations.
- (5) Phase three is illustrated as follows:



- (a) NCAA evaluates the formal submission for compliance with regulations, compliance with the direction provided in this document, other safety -related documents, and safe operating practices.
 - (b) When results of NCAA evaluation are unsatisfactory, return submission to the operator for correction and/or terminate the phase.
 - (c) Begin planning phase four (if required).
 - (d) NCAA approves necessary CAT II/III training, avionics programs, manual revisions, etc.
 - (e) When results of the NCAA evaluation are satisfactory, proceed with phase four and if appropriate, grant conditional approval or acceptance as required.
 - f. **Phase Four.** Phase four is referred to as the Operator Use Suitability Demonstration (OUSD) in AC-28D and 120-29A. In the generic five phase operational approval process it replaces the term Validation Test. Phase four is the line operational evaluation of the operator's ability to conduct CAT II/III operations in accordance with the application evaluated in phase three.
 - (1) Criteria and procedures for evaluating the OUSD are described in Appendix 2. The inspector responsible for overseeing the demonstration must evaluate any discrepancies in terms of its overall impact on the operator's ability and competency to conduct the proposed operation. The inspector must stop the demonstration in phase four when gross deficiencies or unacceptable levels of performance are observed. The inspector must identify the phase of the general process for approval or acceptance to which the applicant must return, or decide to terminate the process entirely when it is clear that continuation would not result in approval or acceptance. For example, if the demonstration is unacceptable because crewmembers were unable to perform their assigned duties, it may be appropriate to advise the operator that the process is terminated pending review and evaluation of the operator's CAT II/III training program, and that the operator may need to re -enter the process at phase two (that is, submit a new proposal).
 - (2) If the NCAA evaluation of the operator's demonstrated ability is acceptable, the process continues. Phase four of the process is illustrated as follows:
 - (a) NCAA plans for the conduct and observation of the demonstration.
 - (b) Operator demonstrates ability;
 - (c) Demonstration unsatisfactory, or
 - (d) Demonstration satisfactory.
- NOTE: An operator shall not, under any circumstances, be authorized or otherwise approved to conduct any particular operation until all airworthiness and operations requirements are met and the operator is clearly capable of conducting a safe operation in compliance with NCAA regulations and safe operating practices.**
- g. **Phase Five.** In phase five the NCAA approves the operator's ILS program proposal. If the proposal is not approved or accepted, the operator is notified in phase three or four. Approval is granted by issuance of OpSpecs, or a Letter of Authorization (LOA) as applicable.

5.0 PROCEDURES

5.1 PREREQUISITES AND COORDINATION REQUIREMENTS.

- a. **Prerequisites.** This task requires knowledge of local and international airspace systems operational requirements, knowledge of NCAA certification rules, policies, operational system



- b. requirements, knowledge of reduced visibility flight operations, aircraft systems, certification requirements, skill in applying system safety principles, and the ability to link local issues with the broader regional, national, and international concerns.
- c. **Coordination.** This task may require coordination with the operator, training vendors, and aircraft/avionics manufacturers.

5.2 REFERENCES, FORMS, AND JOB AIDS

a. References

- (1) ICAO Doc. 9365 – Manual of All Weather Operations for compliance
- (2) Regulations:
Nig. CARs 8.4.1.7, 8.8.1.7, 8.8.1.8; 8.8.1.9, 8.8.1.10, 8.10.1.31
- (3) FAA Advisory Circulars (current editions):
AC 120-28D, Criteria for Approval of Category III Weather Minima for Takeoff, Landing and Rollout
AC 120-29A, Criteria for Approving Category I and Category II Landing Minima for 14 CFR Part 121 Operators

b. Job Aid.

CAT II/III APPROVAL JOB AID (OPERATIONS)

NOTE: Most of the submitted materials evaluated during phase three (training programs, manuals, etc.) shall be evaluated in accordance with the policy and guidance contained in the applicable regulations.

6.0 INSPECTOR PROCEDURES

- a. FOI authorize issuance of ILS CAT I operations via issuance of OpSpec as appropriate. The purpose of this task is for a FOI to authorize ILS CAT I operations.
 - (1) For CAT I, unless the NCAA otherwise specifies that approach demonstrations are necessary due to unusual circumstances or special situations for special systems such as Autoland, operators may conduct CAT I operations without need for special demonstrations, if the aircraft type AFM does not preclude the intended operation.
 - (2) The acceptable task performance is that applicants are issued the OpSpec (or a letter of disapproval of application for the OpSpec) in a timely manner, as appropriate to the content of the application and the qualifications of the applicant.
- b. FOI authorize issuance of appropriate OpSpec for operators to conduct ILS CAT II and III procedures. The purpose of this task is for the FOI to authorize issuance of the appropriate OpSpec (or a letter of disapproval of application for the OpSpec) for operators to conduct ILS CAT II and III operations.
 - (1) It must be emphasized that the principle points of contact with the operator are the FOI and AWIs. Any errors or corrections discovered during the evaluation, must be channeled through those Inspectors back to the applicant. This process will ensure consistency and continuity.
 - (2) The acceptable task performance standard is that the CAT II/III OpSpecs, as applicable, are issued in a timely manner.

c. Initial Inquiry (Phase One)



- (1) Upon initial inquiry, determine the type of operation proposed by the applicant and which of the following apply:
 - (a) Type of operator:
 - (b) CAT II operations
 - (c) CAT IIIa, CAT IIIb operations
 - (d) Type of operation (Autoflight/Autoland, Head-Up-Guidance-System (HGS), etc)
 - (e) Previous CAT III experience (yes/no)
- (2) Advise the applicant to submit a letter of intent. The letter of intent should be submitted before the formal application so the NCAA can dedicate appropriate resources for the evaluation of the application.
- (3) Provide the applicant with a copy of AC(s) 120 -29A (for CAT II applicants), 120 -28D (for CAT III applicants), or advise the applicant on how to obtain a copy of these ACs.
- (4) Provide the applicant with copies of the latest versions of CAT II/III Job Aids.
- (5) Explain the Job Aid to the applicant with particular emphasis on what the contents of the application include, what a compliance statement consists of (see Appendix 1), and what the OUSD entails (Appendix 2). Advise the applicant that the application package should be distinctly divided into an airworthiness section and an operations section for evaluation purposes.
- (6) Advise the applicant of the importance of committing resources in developing the application package and that, even if a perfect package is submitted, the time line requirement (after package approval) will be a minimum of six months for CAT II and an additional six months for CAT III OpSpecs issuance due to the OUSD requirements.

NOTE: The time line may be significantly compressed for operators with CAT II/III experience if they are requesting approval of a different series aircraft of a model that has previously been approved for the operator.

- (7) Advise the applicant to name the company's central point of contact, and provide telephone and fax contact numbers as early as possible.

d. Receipt of Application (Phase 2)

- (1) Upon receipt of the formal application the first task is to inventory the contents of the package:

Application Package

Any proposal for an approval to conduct LVO should be directed to the Chairman, Flight Standard Groups.

A pre-application meeting will be arranged by the assigned Inspector.

The formal application will include the following:

- an application document or exposition that includes, but is not limited to:
 - a description of the proposed operations
 - action(s) taken in accordance with a safety risk assessment of the proposed operations
- aircraft flight manual (AFM) documentation supporting the LVO application.
- information intended to be inserted into the operations manuals covering:
 - crew training
 - crew low-visibility procedures
 - flight administration procedures for tracking automatic landing (autoland) system integrity.



- applicable minimum equipment list (MEL) entries identifying aircraft equipment required for LVO.
- information showing that the relevant aircraft or systems are certified for the particular operation requested.
- aircraft maintenance manual procedures for maintaining autoland status.
- procedure for the operator to determine the aircraft operating minima.

If any of the documentation is missing or appears incomplete the evaluation process may begin on the remaining documents.

- (2) Timely notification to the operator on the documents that are missing or incomplete should be made as soon as practical.

e. Evaluating the Formal Application Package (Phase 3)

- (1) Begin the evaluation of the applicant's package by entering the operator's name and applicable type of operation on the Job Aid.
- (2) Then following the Job Aid line by line, enter the appropriate page or section from the operator's documents into the Operator's Reference Document column. Note the Job Aid has linked references to AC's, regulations, and orders that will provide additional guidance during the conduct of the evaluation. What follows is a representative section of the Flight Operations Job Aid illustrating how entries are made by the reviewing inspector.

FLIGHT OPERATIONS JOB AID SAMPLE

Note: Instructions:

Inspectors will use CAA Checklist: CA AOC-C-FO-011: "CAT II/III Approval Job Aid to reflect the following information:

		FLIGHT OPERATIONS	Operator's Reference Document
	1	OPERATOR PROCEDURES	OM = Operations Manual
	1.A	Type of Operation	OM, 1.1.0 & 1.2.0
	1.13	CAT II and CAT IIIA Instrument Approach Procedures	OM, 1.4, 1.5 and 1.6
	1.C	AFM/FOM/POH/QRH Provisions, as applicable	Need pertinent portions
	1.13	Crew Coordination and Monitoring Procedures	OM Chapter 1
	1.E	Callouts	OM Chapter 1
	1.F	Use of DA (H) and MDA (H) [Fail Passive]	OM Chapter 1
	1.G	Use of Alert Height (AH) [Fail Active]	Not applicable
	1.H	Crew Briefings	OM Chapter 1



1.I	Configurations	OM Chapter 1
1.J	Non-Normal Operations and Procedures	OM Chapter 1
1.K	Special Environmental Considerations (as applicable)	Not covered
1.L	Continuing CAT IF IIIA Approaches in deteriorating Weather C	OM Chapter 1
1.M	Dispatch Planning and MEL/CDL Requirements	No CAT II list (OM 3.1.3)
1.N	Aircraft System Suitability Demonstration (as required)	Not applicable
1.O	Operator Use Suitability Demonstration	Need OUSD plan
1.Q	Operational Procedure for Return to Service	No clear procedure found
1.P	Data Collection/Analysis for Airborne System Demonstrations	Need OUSD plan J

(3) While the Job Aids provide a systematic, standardized approach to conducting the evaluation, they do not provide sufficient depth and scope to capture areas that are identified as needing additional work. These areas may be complex and need further clarification, or be as simple as typographical errors that require correction.

(4) Therefore the inspector should initiate and maintain a separate comment document list of findings while conducting the evaluation. The following is an example of what such a list may look like, and illustrates the depth and scope of what the evaluation should consist of:

COMMENT DOCUMENT LIST: EXAMPLE

<p>ABC Air Transport has submitted a CAT II/IIIA Operations Manual (hereafter referred to as OM) containing nine (9) tabbed sections, named as follows:</p>
1. Table of Contents
2. Preface
3. Log of Revisions
4. List of Effective Pages
5. Chapter 1
6. Chapter 2
7. Chapter 3
8. Chapter 4
9. Appendix
<p>It is noted that the List of Effective Pages, pages 1 and 2, have been marked FAA-Approved with an effective date of 6/28/05. However, the FAA has not yet approved this OM.</p>
<p>The following is a list of concerns after review by the POI/PMI/PAI:</p>



The Table of Contents for Chapter 1 does not list or refer in any way to CAT II procedures and instructions, while in fact the OM purports to apply to CAT II/IIIA procedures and instructions.
Section 1.2.0, line 1, refers to This CAT IIIA Manual when in fact the OM is labeled CAT II/IIIA Operating Manual.
The second full paragraph in section 1.2.0 states: The airplane to which this Manual applies may be used to conduct CAT IIIA operations provided the instruments and items of equipment listed herein that are required for a particular CAT IIIA operation are: but does not state it can be used to conduct CAT II operations.
Throughout the OM CAT II and CAT IIIA procedures and instructions are not clearly separated, resulting in some confusion to the reader. Paragraph 6.1.7 in Advisory Circular 120 -28D states The operator should assure that to the greatest extent possible, procedures for CAT IIIA are consistent with the procedures for that operator for CAT II and CAT I to minimize confusion about which procedure should be used or to preclude procedural errors.

- f. During the evaluation, if any documents or other relevant parts of the application require correction, are missing, or are incomplete, the applicant should be notified immediately. Normally documents should not be returned to the applicant unless so requested. This facilitates the ability to compare newly revised material with its earlier version. A log should be kept by the reviewing inspector to maintain a historical record of telephone conversations, e-mails, or other forms of correspondence that occurs during the evaluation period. However, if the majority of the application package is deemed to be unacceptable to the inspector, it should be returned with a letter of disapproval (Figure 2).
- g. The Demonstration Phase (Phase Four). Phase four is referred to as the OUSD. This phase begins if the application package is in order and has been approved. The OUSD plan submitted with the application is the primary vehicle used for conducting this phase. Guidance for the OUSD, and an example of an acceptable OUSD plan are contained in Appendix 2.
- h. The Approval Phase (Phase Five). OpSpecs authorizations are issued on the special authorization.

FIGURE 1. SAMPLE LETTER OF INTENT TO CONDUCT CAT II OR III OPERATIONS

[date]

The ABC Airlines (proposed CAT II/IIIA operator)

Dear Inspector

ABC Airlines operates 7 Airbus A330 aircraft as a Nigerian AOC holder with our Operational Headquarters located Murtala Muhammed International Airport. We conduct scheduled operations to various destinations worldwide. Because of the predominant inclement weather (fog and dust) during certain months of the year we find it necessary to conduct instrument landing system (ILS) approaches at many of our destinations.

During our last two years of operations, we have experienced an unacceptable rate of missed approaches especially during the autumn and winter months.

Our aircraft are equipped with state of the art avionics system that is certified by the OEM (Airbus) to conduct CAT II/IIIA operations.



Please consider this ABC's letter of intent to apply for unrestricted CAT II and CAT IIIa flight operations. We look forward to your advice and guidance on this very important endeavor.

Sincerely, Captain Z. Y. Wazobia
Director of Operations

FIGURE 2. SAMPLE LETTER OF DISAPPROVAL OF A CAT 11/111A APPLICATION PACKAGE

Subject:	INFORMATION: ABC Airlines Ltd. A330,	Date:
	CAT II/IIIa Operations	
From:	Operations Inspector	Reply to
	AGL-230	Attn. of:
To:	ABC Airlines,	

This is to inform you that the CAT II/IIIa application package submitted on [*indicate date*] has been disapproved for the following reasons:

[list reasons for disapproval]

The application package is being returned in its entirety.

Please make the corrections noted and resubmit to this office within 15 days of receipt of this letter.

If you have any questions, please feel free to contact this office during regular business hours at the following telephone number *[indicate number]*.

If you have any further questions concerning this matter, please contact Primary Operations Inspector *[name]* at Tel.

Sincerely,
[OI's Signature]

FIGURE 3. SAMPLE LETTER OF APPROVAL OF A CAT 11/111A APPLICATION

Subject:	INFORMATION: ABC Airlines Ltd.	Date:
	A330, CAT II/IIIa Operations	
From:	Flight Operations Inspector	
	NCAA	Attn. POI, ABC Airlines
		email:
To:	Director Operations & Training	

We have completed our operational/Airworthiness review of the ABC Airlines Inc. application for fail passive CAT II/IIIa approval for their A330 aircraft and find they meet all the provisions set forth in the applicable advisory circulars and Nig. CARs.



We recommend approval be granted to initiate ABC's Operational Use Suitability Demonstration (OUSD) as soon as practical. After successful completion of the OUSD, CAT II minima (100 DH/RVR 1200 RVR) may be authorized. Thence, minima may be further reduced according to the following timetable:

AUTHORIZATION DH/AH//RVR	DEMONSTRATION PERIOD (OUSD)	# LANDINGS*
CATEGORY II 100'DH/1200	6 MONTHS	50
CATEGORY IIIb 100'AH /600	6 MONTHS	50

Upon successful completion of their OUSD, ABC airlines aircraft will be added to our CAT II/III status list. If you have any further questions concerning this matter please contact Inspector [name], at Tel.

APPENDIX 1. COMPLIANCE STATEMENT

Compliance Statement. Any operator that has no previous experience with ILS CAT II/III operations shall prepare a compliance statement. Operators with previous CAT II/III approved programs are not required, but are encouraged to submit a compliance statement or an amendment to a previously submitted compliance statement.

- (1) Preparation of the compliance statement benefits the applicant by systematically ensuring that all applicable a r e a s are appropriately addressed during the evaluation process. The compliance statement shall be in the form of a complete listing of all appropriate advisory circular (AC 120-29A and or AC 120-28D) sections pertinent to the operation the applicant is proposing.
- (2) Next to each listing, the applicant must provide a specific reference to a manual, or other document in the application package, and may provide a brief narrative description that describes how the applicant will comply with each section. The compliance statement also serves as a master index to the applicant's manual system to expedite the NCAA's review and approval of the operation and manual system. The compliance statement is an important source document during the evaluation process.
- (3) After the evaluation process is completed, the compliance statement should be kept current as changes are incorporated in the applicant's system. Compliance statements should be prepared as a two-volume application. Volume I should contain the AC reference by section (i.e., AC 120-29A, section 6.1.8) and provide the location in the operator's source document (i.e., AFM, sec. 2.4, pg. 36). Volume II should contain all the relevant operator documents pertaining to the operator's application package.

(4) Examples of the compliance statement format are provided below:

(i) EXAMPLE 1. COMPLIANCE STATEMENT. TABLE OF CONTENTS

NOTE: The table of contents in the operator's application package should mirror the table of contents contained in AC 120-29A and AC 120-28D as follows.

**LOWER MINIMUM PROGRAM (LMP) APPLICATION CATEGORY II AND CATEGORY IIIA
AUTOMATIC LANDING OPERATIONS TABLE OF CONTENTS**

(a) VOLUME I



1. General
2. Related References and Definitions
3. Background
4. Operational Concepts
5. Airborne System Requirements
6. Procedures
7. Training and Crew Qualifications
8. Airports, Navigation Facilities and Meteorological Criteria
9. Continuing Airworthiness/Maintenance
10. Approval of South African Operators
11. Foreign Air Carrier Category IIIA at Nigerian Airports (AOC holder Operations Specifications)
12. Operator Reporting, and Taking Corrective Actions

**EXAMPLE 2. COMPLIANCE STATEMENT: SECTION 1 (ABOVE), GENERAL
ABC AIRLINES, Ltd. LOWER MINIMUM PROGRAM (LMP) APPLICATION
CATEGORY II AND CATEGORY IIIA AUTOMATIC LANDING OPERATIONS**

GENERAL

The ABC Airlines, L t d . Lower Minimum Program (LMP) Application Volumes I and II, are prepared, and hereby submitted to demonstrate compliance with the NCAA directives pertaining to CAT II, IIIA and Autoland operations for the purposes of receiving NCAA approval via OpSpecs.

Per the requirements contained in AC 120 -28D and AC 120-29A, ABC Airlines, Ltd. requests the issuance of operations specifications (OpSpecs) for the A330. Samples of these OpSpecs are included at the end of this General section. These OpSpecs are necessary to authorize automatic landings and CAT II operations to a decision height (DH) of 100 feet and a corresponding RVR of 1200. CAT IIIA operations to a DH of 50 feet and RVR of 700 feet are simultaneously applied for and here incorporated. Advisory Circular 120 - 28D, section 10.12, page 81, Initiating New Combined CAT II and CAT IIIA programs, sets forth the acceptable provisions for the ABC Airlines combined LMP application methodology.

The Compliance Table (section 1, page 2, Table 1) sets forth each prerequisite on the following pages. Moreover, FAA AC 120-29A and AC 120-28D are referenced throughout.

This application is constructed in a manner that demonstrates compliance with each applicable paragraph of AC 120-29A and section of AC 120-28D. ABC Airlines, Ltd. compliance statements begin in volume 1, section 2, and page 1 of this application. Paragraphs/sections listed under the Advisory Circular Reference column describe how ABC Airlines, Ltd. has achieved compliance with AC 120-29A and AC 120-28D. A Source Document column lists the reference document title, section/chapter and page numbers.

WEATHER MINIMA OBJECTIVES

ABC Airlines, Ltd. seeks an initial automatic landing authorization with CAT I landing weather minima or better and decision height. After a satisfactory number of autolands have been demonstrated, CAT II minima (100 DH/RVR 1200) can be authorized.



After a minimum of 6 months and 100 landing demonstrations, ABC Airlines, Ltd. seeks provisional CAT IIIA minima of not less than 100 feet above the touchdown zone and not less than RVR 1000. Pending completion of the provisional CAT IIIA demonstration period (minimum 6 months/ 100 landing demonstrations) ABC seeks CAT IIIA landing weather minima of not less than 50 feet above the touchdown zone and not less than RVR 700. For CAT II, provisional CA T IIIA, and CAT IIIA a reduction in the required number of landing demonstrations may be requested IAW AC 120-28D, section 10.5.2

EXAMPLE 3. COMPLIANCE STATEMENT: “Statement of Compliance” format to be used...

REGULATION	METHOD OF COMPLIANCE MANUAL REFERENCE (SOURCE DOCUMENT)	Not Applicable	Acceptable	Unacceptable	Note number
Nig. CARs: 1. GENERAL Applicability					
X.X.X.X					

...to reflect the following information (Operations):

BACKGROUND (Operations)

2. ADVISORY CIRCULAR REFERENCE	SOURCE DOCUMENT
Major Changes Addressed in this Revision (AC 120 -29A & AC 120-28D)	AC 120-29A, par.3.1, page 2
ABC Airlines, Ltd. does not seek approval for low visibility approaches using: head-up displays, use of required navigation performance (RNP), satellite based navigation, engine inoperative CAT II or IIIA approaches, or wide -body fail passive operations.	AC 120-28D, section 3.1, page 2
Relationships of Operational Authorizations for CAT I, II or IIIa and Airborne System Demonstrations (AC 120 -29A & AC 120-28D)	A330 FOTM, page 4.19
	AFM, section 1, page 15
	AFM, section 3,



The A330 is type certified (TC) by the original equipment manufacturer (OEM) as a CAT IIIA aircraft. No initial airworthiness demonstrations of airborne equipment and systems is required.	pages 4A, 5, SA, 6
Applicable Criteria (AC 120-29A & AC 120-28D)	AC 120-29A, par. 3.3,
Current AC 120-29A and AC 120-28D has been used to	page 2
establish CAT II/IIIA operations. ABC Airlines, Ltd. will	AC 120-28D,
comply with AC 120-29A and AC 120-28D criteria.	section 3.3, page 3
CAT I, II, and IIIa Terminology (AC 120-29A)	AC 120-29A,
ABC Airlines, Ltd. CAT I, II, and IIIA definitions are consistent with U.S. standard operations specifications,	Appendix 1, pages 1-18

OPERATIONAL CONCEPTS (Operations)

3. ADVISORY CIRCULAR REFERENCE	SOURCE DOCUMENT
<p>Classification and Applicability of Minima (AC 120-29A & AC 120-28D) ABC Airlines, Ltd. is seeking CAT IIIA operations. ABC Airlines, Ltd. will be conducting operations using approved autoland systems and procedures. There is no proof of concept (POC) required. The airplane and its associated systems have demonstrated the necessary level of accuracy, integrity, and availability. This was shown initially during the original equipment manufacturer type certificate (OEMTC) airworthiness demonstrations. Compliance will be confirmed during the Operator Use Suitability Demonstration (OUSD) and will be monitored by ABC Airlines, Ltd. on a continuing basis.</p>	<p>AFM, section 1, page 18 AFM, section 4, pages 4A, 5, SA, 6, 7</p>
<p>Takeoff Minima (AC 120-29A & AC 120-28D) ABC Airlines, Ltd. takeoff minima are IAW OpSpecs - Low visibility Takeoff Minimums Operations – All Airports.</p>	<p>Ops Specs</p>
<p>Landing (AC 120-29A & AC 120-28D) Approach and Landing Concepts and Objectives (AC 120-29A) ABC Airlines, Ltd. is currently a CAT I operator. By this application and approval process, ABC Airlines, Ltd. is seeking authorization for CAT II approaches to a decision height (DH) of not less than 100 feet with a runway visual range (RVR) of not less than 1200 feet.</p>	<p>AC 120-29A, par. 4.3.1, pages 4-5 AC 120-28D, section 10.9, pages 79 80 AC 120-28D, section 10.12, page 81</p>



APPENDIX 2. OPERATOR USE SUITABILITY DEMONSTRATION (OUSD)

1. INTRODUCTION

- a. Purpose.** The purpose of the Operator Use Suitability Demonstration (OUSD) is to demonstrate and validate the reliability and performance of lower minimum programs (LMP) in line operations consistent with the operational concepts specified in AC120-29A and AC120-28D as applicable. Demonstration requirements are established considering applicability of previous operator service experience, experience with a specific aircraft type by other operators, experience of crews of that operator and other such factors. The demonstration period is **six months long for each phase (CAT II and CAT III)** to permit the CAA to evaluate the ability of the operator to maintain and operate its proposed LMP system. During the demonstration period at least **10 percent** of the required number of landings should be observed by an appropriately qualified CAA operations inspector. For this purpose, an appropriately qualified operations inspector is:
- For small piston and turboprop airplanes, or helicopters, qualified in the appropriate category and class;
 - For large helicopters, qualified in a helicopter over 12,500 pounds;
 - For large piston or turboprop airplanes, qualified in an airplane over 12,500 pounds: For small turbojets, qualified in the appropriate category and class;
 - For large turbojets, qualified in a turbojet airplane over 12,500 pounds.
- b. CAT II Demonstrations.** For CAT II, at least one hundred (**100**) landings should be accomplished, at least a 95 percent success rate, in line operations using the CAT II or CAT III system installed in each aircraft type, unless fewer approaches are determined to be appropriate by the CAA. Examples of situations where fewer approaches than 100 may be authorized by the CAA include credit for an operator also experienced in CAT II or III operations, addition of a different or new aircraft type for an operator when that aircraft type already has successful CAT II or III experience with a similar operator. Fewer approaches may apply (e.g., certain long range aircraft using CAT III procedures and training, but with interim limitations to use CAT II minima). The demonstration period should not be less than six months for operators seeking CAT II authorization. Experienced CAT II operators may operate new or upgraded aircraft types/systems, or derivative types, using reduced length demonstration periods (e.g., less than 6 months/ 100landings) when concurrence is received by the FOI from the CAA.
- c. CAT III Demonstrations.** For CAT III, at least one hundred (**100**) successful landings should be accomplished in line operations using the low visibility landing system installed in each aircraft type applicable to the CAT III authorization. Demonstrations may be conducted in line operations, during training flights, or during aircraft type or route proving runs. The demonstration period should run for six months. Therefore, if an operator seeks CAT II initially and then CAT III subsequently, the total demonstration period will be 12 months.
- d. Combined Programs.** CAT II and CAT III programs may be initiated simultaneously for new operators or for existing operators currently approved for CAT I. Appropriate provisions of both AC 120-29A, as amended, and AC 120-28D are used. Operational Suitability Demonstration programs may be simultaneously conducted as long as procedures and systems applicable to both CAT II and CAT III minima are assessed (e.g., use of CAT II DH vs. CAT III AH). The total demonstration period in this case should be no less than six months for the operator to gain CAT II and CAT III authorization.



- e. If an excessive number of failures (e.g., unsatisfactory landings, system disconnects) occur during the landing demonstration program, a determination should be made for the need for additional demonstration landings, or for consideration of other remedial action (e.g., procedures adjustment, wind constraints, or system modifications).
- f. During the period following the issuance of new or revised operations specifications for CAT III (typically 6 months), the operator must successfully complete a suitable operations demonstration and data collection program in line service for each type aircraft, as the final part of the approval process.

2. SAMPLE OUSD PLAN. What follows is an example of an OUSD plan that is acceptable to the NCAA

- g. General.** This Operator Use Suitability Demonstration (OUSD) Plan contains direction, and guidance to be utilized by ABC Airlines, Ltd personnel responsible for conducting and managing demonstration ILS coupled approach and automatic landings required for CAA issuance of Operations Specification, CAT II Instrument Approach and Landing Operations. It shall also provide applicable guidance and direction for required follow-on demonstration landings to be required for CAA issuance of OpSpec, CAT III Instrument Approach and Landing Operations.

(1) Responsibility and Authority. The Director of Operations is responsible for implementation of all operational procedures required by this OUSD plan. The Director of Maintenance is responsible for implementation of all maintenance procedures required by this OUSD plan. They are jointly responsible for providing routine and regular updates and feedback to the FOI, and AWIs Operational/Airworthiness Demonstrations, Aircraft System Suitability and Operational Use Suitability demonstrations must be completed as described in AC 120 -29A: Criteria for Approving CAT I and CAT II Landing Minima for Approach, par. 10.5.1 and 10.5.2, unless otherwise specified by A C 120-28D, Criteria for Approval of CAT III Weather Minima for Takeoff, Landing and Rollout, specifies similar OUSD requirements for CAT III approval. Once ABC is approved for CAT II operations this plan will be updated with the appropriate CAT III OUSD requirements. The purpose of these operational demonstrations is to determine or validate the use and effectiveness of the applicable aircraft flight guidance systems, training, flight-crew procedures, maintenance program, and manuals applicable to the program being approved. ABC's A330 FAA-Approved AFM references both ACs as the criteria used as the basis for both CAT II and CAT III airworthiness demonstrations, therefore our A330 fleet is already considered to meet the provisions of 10.5.1. This OUSD Plan is designed to address provisions of 10.5.2., requiring verification of operational use suitability for initial CAT II approval.

(2) Requirements. For CAT II authorization, at least one hundred (**100**) successful landings will be accomplished in line operations using the autoland system. It is a good practice to conduct at least one approach using the autoland system to each runway intended for CAT II operations in weather better than that requiring use of CAT II minima. Such demonstrations may be conducted in line operations, or during training or ferry flights. In any case every demonstration autoland must be conducted in weather equal to or greater than ABC's current CAT I operating minima; 200 ft DA, RVR 1800.

- (a)** If an excessive number of failures (e.g., unsatisfactory landings, system disconnects) occur during the landing demonstration program, a determination will be made for the need for additional demonstration landings, or for consideration of other remedial action (e.g., procedures adjustment, wind constraints, system modifications).
- (b)** The system must demonstrate reliability and performance in line operations consistent with the operational concepts specified in and required by OpSpec.
- (c)** Landing demonstrations will generally be accomplished on international facilities acceptable to the NCAA.



- (d) At ABC's discretion, demonstrations may be made on other runways and facilities if sufficient information is collected to determine the cause of any unsatisfactory performance (e.g., critical area was not protected). No more than 50 percent of the demonstrations may be made on such facilities.

NOTE 1: Every demonstration autoland must be conducted in weather equal to or greater than ABC's current CAT I operating minima; 200 ft DH, RVR 1800.

NOTE 2: For takeoff or landing operations less than 1200 RVR, air carriers must have low visibility training in accordance with AC 120-57, Surface Movement Guidance and Control System (SMGCS), current edition.

(3) Documentation.

(a) **Tracking Autoland Approaches.** ABC monitors aircraft maintenance performance trends through the Continuous Analysis and Surveillance Program (CASP). CASP is designed to assist in detection and correction of recurring problems in the A 330 fleet. CASP action is predicated on the Inbound Airbus ATA codes entered in the logbook. Should any ATA code be entered in the logbook three times or more in any 20 -day period, the item will be flagged and analyzed for systemic corrective action by the Engineering department. Therefore, it is extremely important for crewmembers to enter the correct ATA code when making logbook entries, particularly when related to the aircraft Autoflight system and Autoland performance. Flight crews will use Form ABC OUSD-1 (sample below) to record all unsatisfactory Autoland approaches. A logbook entry is also required for any unsatisfactory Autoland. Form ABC OUSD -1 will be left with the aircraft logbook for scanning into the maintenance tracking system (retained for one year). This information will also be retrieved by the CASP and published monthly in the Fleet Maintenance CASP Report. All Autoflight system history is also available in the maintenance tracking system by the applicable ATA chapter. The crew is responsible to notify dispatch of all Autolands by Aircraft Communications Addressing and Reporting System (ACARS) message at the end of each flight. Dispatch will ensure that Maintenance Control is notified of all Autolands in a timely manner so that appropriate record keeping and maintenance action can be taken.

(b) **Autoland Messages.** Autoland messages are accessed through ACARS page 2 of the FLT Summary page, automatic approach:

FLIGHT SUMMARY PAGE 2: AUTOMATIC APPROACH

a. Enter required information as follows:

- (1) Select YES;
- (2) Enter RUNWAY used;
- (3) Enter reported RVR visibility in feet
- (4) Enter SAT or UNSAT as appropriate for the Autoland;
- (5) Enter DISC ALT disconnect altitude in feet or enter 0 (zero) for full Autoland;
- (6) SEND when all required fields are filled.

b. **Reporting Requirements.** Upon receipt of an ACARS, FLIGHT SUMMARY, AUTOMATIC APPROACH message in dispatch, Maintenance Control will enter all data on a CAT II OUSD tracking spreadsheet and forward the message to the following management personnel:

- (1) Director of Operations, Captain Joe Malla



- (2) Director of Maintenance, Don Abu
- c. **Maintenance Control.** During each Morning Meeting for the duration of this OUSD, Maintenance Control will brief all attendees as to the current status of OUSD landings including the following statistics:
- Autolands attempted: previous 24 hours
 - Satisfactory autolands previous 24 hours
 - Unsatisfactory autolands with preliminary reasons
 - Total satisfactory autolands to date
 - Total unsatisfactory autolands to date
 - CAA feedback if any
- (1) Should there be any unsatisfactory autolands reported, the Director of Maintenance and the Director of Operations are jointly responsible to determine whether maintenance factors, operational factors, or some combination thereof are responsible for the unsatisfactory autoland and to develop appropriate remedial procedures.
- (2) Additionally, Maintenance Control is responsible for maintaining a current and inspectable OUSD file of all relevant email messages and A330 Autoland Discrepancy Forms. This file may be maintained in electronic format or by the maintenance tracking system with scanned A330 Autoland Discrepancy Forms.
- d. **Form ABC OUSD-1- A330 Autoland Discrepancy Form.** Flight crews will use form ABC OUSD-1 to record all unsatisfactory Autoland approaches. An unsuccessful autoland is defined as follows:
- Aircraft fails to maintain runway track satisfactorily
- Drift rate is excessive
 - Aircraft does not touch down within the touchdown zone
 - Auto Flight system does not maintain the aircraft within required performance parameters when within the Decision Region
 - Any other performance abnormality, e.g., early Auto Flight disconnect, failure to ALIGN, failure to
 - FLARE, failure to RETARD autothrottles, or failure to ROLLOUT properly
- (1) A logbook entry is required for any unsatisfactory Autoland. Forms ABC OUSD -1-A330 will be left with the aircraft logbook for scanning into the maintenance tracking system (retained for one year). This information will also be retrieved by the CASP and published monthly in the Fleet Maintenance CASP Report.
- (2) All Auto flight system history is also available in the maintenance tracking system by the applicable ATA chapter. The crew is responsible to notify dispatch of all Autolands by ACARS message at the end of each flight.
- (3) Figure 1 below constitutes Form ABC OUSD-1-A330 Autoland Discrepancy Form.
- e. **Data Collection Requirements and Miscellaneous Considerations.** Form ABC OUSD-1- A330 Autoland Discrepancy Form was developed to allow the flight -crew to r e c o r d unsatis fac tory approach and landing performance. The resulting data and a summary of the demonstration data will be made available to the FSDO for evaluation. The data provided by ABC OUSD -1- A330 forms includes the following information:



- (1) Information regarding the inability to initiate an approach or identify deficiencies related to airborne equipment.
- (2) Information regarding abandoned approaches, stating the reasons the approach was abandoned and the altitude above the runway at which the approach was discontinued or the automatic landing system was disengaged.
- (3) Information regarding any system abnormalities, which required manual intervention by the pilot to ensure a safe touchdown or touchdown and rollout, as appropriate
- (4) **Data Analysis.** Unsatisfactory approaches using facilities approved for CAT II or CAT III where landing system signal protection was provided should be fully documented. The following factors should be considered:
 - (a) **ATC Factors.** ATC factors that result in unsuccessful approaches should be reported. Examples include situations in which a flight is vectored too close to the final approach fix/point for adequate localizer and glide slope capture, lack of protection of ILS critical areas, or ATC requests for the flight to discontinue the approach.
 - (b) **Faulty NAVAID Signals.** NAVAID (e.g., ILS localizer) irregularities, such as those caused by other aircraft taxiing, over-flying the NAVAID (antenna), or where a pattern of such faulty performance can be established should be reported.
 - (c) **Other Factors.** Any other specific factors affecting the success of CAT II operations that are clearly discernible to the flightcrew should be reported. An evaluation of reports discussed above will be made to determine system suitability for authorization for CAT II operations.

NOTE: Every demonstration autoland must be conducted in weather equal to or greater than ABC's current CAT I operating minima; 200 ft DA, RVR 1800.



SAMPLE FORM FOR FLIGHT CREW REPORT ON AUTO-APPROACH AND AUTO-LAND PERFORMANCE

1. SECTION I – Complete all items					
Aircraft Type	Aircraft Registration No.	Captain	Flight No.	Date	
Airport	Runway	Conditions Cat I+ <input type="checkbox"/> Cat II <input type="checkbox"/> Cat IIIA/B <input type="checkbox"/>	Wind Direction & Speed	ATC runway Protection provided <input type="checkbox"/> Unknown or None <input type="checkbox"/> Cat II	
The Auto-Approach Auto-Land was: <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory					
If unsatisfactory you must complete Section II					
Auto-Land Touchdown Zone is 900 feet to 2400 feet down the runway and within 27 feet of centerline.					
Record area of touch down with an 'X' on Runway Depiction					
2. SECTION II – Complete ONLY if Auto-Approach or Auto-Land was UN-SATISFACTORY.					
If the Approach was discontinued, it was due to:					
<input type="checkbox"/> Airborne Equipment Failure <input type="checkbox"/> Ground Facilities Difficulties <input type="checkbox"/> ATC Instructions <input type="checkbox"/> Other (Specify)					
LOCALIZER (Left/Right) GLIDESLOPE (High/Low)					
OUTER		MIDDLE		INNER	
L <input type="checkbox"/>	H <input type="checkbox"/>	L <input type="checkbox"/>	H <input type="checkbox"/>	L <input type="checkbox"/>	H <input type="checkbox"/>
R <input type="checkbox"/>	L <input type="checkbox"/>	R <input type="checkbox"/>	L <input type="checkbox"/>	R <input type="checkbox"/>	L <input type="checkbox"/>
If the autopilot was disconnected the altitude was _____ ft MSL.					
Other Comments					

OPERATOR _____

(Commander's Signatures)

**APPENDIX 3. ISSUANCE OF CAT II/III LANDING MINIMA****I. FOR THE OUSD PHASE:** Validation of CAT II/III Maintenance Programs.**a. General.** The OUSD phase consists of two sub phases:

- (1) The first sub phase is referred to as the OUSD landing phase. During this period the operator conducts the number of landings (normally 100) using the CAT II or CAT III systems approved in the previously submitted OUSD plan. The weather minima used by the operator is prescribed as one step higher than the CAT II/III authorization being applied for. In other words, a CAT II applicant must conduct 100 landings in CAT I (or better) weather conditions. A CAT III applicant must conduct 100 landings in CAT II or better weather. A success rate of 90 percent is required.
- (2) The first sub phase is completed after a success rate of 90 percent has been achieved during the OUSD landing phase. The second phase, the OUSD Demonstration phase, begins after completion of the first sub phase when the FOI issues the appropriate OpSpecs/LOA with the appropriate restricted lower minima and any other required restrictions. After successful completion of the OUSD demonstration sub phase unrestricted minima are issued by the FOI.
- (3) The second sub-phase, referred to as the OUSD Demonstration phase commences from the date of the first OUSD landing concurrently for a period of six months. To initiate this phase, the FOI/Program Manager issues the appropriate OpSpecs/LOA with the appropriate lower minima and any other required restrictions. After successful completion of the OUSD demonstration sub phase unrestricted minima are issued by the FOI.

b. Achieving Lower Minima. Special design requirements and special maintenance programs are necessary to achieve the airborne system reliability required for the conduct of CAT II/III operations. The special maintenance programs necessary for CAT II/III operations are extensive and expensive and are usually the largest factors affecting an operator's decision of whether to conduct these operations.

- (1) When an operator/program manager requests authorization to conduct operations with aircraft equipped with standard CAT II equipment, and that operator is new to CAT II operations, CAT II operations are usually restricted (for at least 6 months) to higher-than-standard operating minima (DH 100 and RVR 1600). These are the minima issued after successful completion of the OUSD landing phase outlined above. This restriction must remain in place until the operator has successfully validated its maintenance program (the OUSD Demonstration phase outlined above) IAW AC 120 -29 (as amended) and the lower landing minima (LLM) maintenance program outlined in Order 8300.10, volume 2, chapter 3. However, if an aircraft has a type design approval for CAT III operations, it may be possible for the operator to be initially authorized for standard CAT II minima (DH 100 and RVR 1200) with those aircraft if certain equipment restrictions and operating procedures are specified in the operator/program manager's OpSpecs/LOA.
- (2) When the operator has successfully validated its maintenance program, the restriction that requires the airborne equipment to be operated to CAT III standards can be removed by amending the operator/program manager's OpSpecs/LOA to authorize the use of DH 100/RVR 1200 minima with standard CAT II equipment (e.g., single channel autopilot, or manually flown (HGS) operations). The CAT III equipment would still be required to conduct any operations with operating minima of DH 100 and RVR 1000 for CAT II operations at foreign airports and U.S. ILS Type III facilities. In standard CAT II operations, the objective of the requirement for an operator/program manager to validate the CAT II maintenance program for at least 6 months with minima restricted to DH 100 and RVR 1600 is to ensure that the required level of airborne equipment reliability is achieved. This is to ensure that frequent malfunctions will not occur in standard CAT II operations (DH 100 and RVR 1200). The design features of CAT III airborne equipment significantly reduce the potential for failures that could adversely affect standard CAT II operations. As a result, validation of the CAT II maintenance program before conducting operations to DH 100/RVR 1200 is not necessary if these operations



are conducted under a restriction that requires the airborne equipment to operate to CAT III standards (e.g., fail passive or fail operational automatic landing). This permits the operator/program manager to conduct operations with standard CAT II minima during the 6-month period used to validate its maintenance program.

- c. New CAT II Operators.** New operators should follow the demonstration period provisions (normally 6 months) in the approved OUSD plan. Additionally, typical acceptable minima step down provisions approvable by FAA are as follows:

Starting from CAT I to CAT II: First DH 100/RVR1600, then DH 100 and RVR 1200 (AC 120-29A, section 10.9, page 132)

- d. New CAT III Operators.** New operators should follow demonstration period (6 month) provisions provided for in the approved OUSD. Additionally, typical acceptable minima step down provisions approvable by FAA are as follows:

(1) Starting from CAT I:

- Fail - Passive Landing System 100 ft. DH/RVR1000 then 50 ft. DH/RVR600
- Fail - Operational Landing System 100 ft. DH/RVR1000 then RVR600, then RVR300

(2) Starting from CAT II:

Fail - Passive Landing System 50 ft. DH/RVR600
Fail - Operational Landing System RVR600 then RVR300
(AC 120-28D, section 10.9, page 77)

- e. Experienced CAT II Operators Seeking CAT III Authorization.**

- (1) Operators with previous CAT II experience may warrant a reduction in the OUSD requirements based on their previous experience. All approach/autolands should be conducted using the operator's approved CAT III procedures.
- (2) If the operator is seeking CAT III approval on the same make/model aircraft it was previously authorized CAT II approval, the OUSD should require a minimum of 50 approach/autolands (OUSD landing sub-phase) at CAT II or better minima. Then the CAT III minima are issued as follows:
- Fail - Passive Landing System 50 ft. DH/RVR600
 - Fail - Operational Landing System RVR300

NOTE: The operator is still required to report their CAT III Approach/landing information (OUSD Demonstration sub-phase) for a six-month period commencing with the first CAT III approach/autoland.

- (3) If the operator is seeking CAT III approval on a different make/model series aircraft than it was previously authorized CAT II approval, the OUSD should require a minimum of 50 approach/autolands (OUSD Landing sub-phase) at CAT I or better minima. Then the CAT II minima are issued as follows:
- Fail - Passive Landing System 100 ft. DH/RVR1200
 - Fail - Operational Landing System 100 ft. DH/RVR1000
- (4) Following successful completion of the OUSD Demonstration sub-phase, which commences for a six-month period with the first CAT III approach/autoland, the operator is issued the CAT III minima as follows:
- Fail - Passive Landing System 50 ft. DH/RVR600



- Fail - Operational Landing System RVR300

NOTE: The operator is still required to report their CAT III Approach/landing information (OUSD Demonstration sub-phase) for an additional six-month period (for a total of twelve months) commencing with the first CAT III approach/autoland.

2. AFTER THE DEMONSTRATION PHASE.

a. Approval of Landing Minima. When the data from the operational demonstration has been analyzed and found acceptable, an applicant may be authorized the lowest requested minima consistent with this Order and applicable OpSpecs/LOA. Several examples are provided below:

- (1) For CAT III, fail passive operations where the operator was initially authorized RVR1000 to begin a demonstration program, following successful demonstration that operator may be authorized to operate to minima of RVR600.
- (2) For CAT III fail operational operations, where the operator was initially authorized RVR1000 to begin a demonstration program, following successful demonstration that operator may be authorized to operate to minima of RVR600 or RVR300 as applicable.
- (3) If the CAT III rollout control system has been shown to meet the appropriate provisions of Appendix 3 of AC-120-28D, and the airborne and ground systems including applicable ILS, GLS or MLS, Surface Movement Guidance and Control (SMGCS), and weather reporting (e.g., RVR) are each suitable, then operational approvals for operations below RVR300 may be authorized. Such authorizations are considered only for specific facilities on a case -by-case basis.

b. OpSpecs/LOAs.

All standard CAT II/III operations are restricted to airports and runways that meet the special safety requirements necessary for CAT II/III operations. Even though a particular runway is approved for CAT II/III operations, an operator/program manager cannot be authorized to conduct CAT II/III operations at that location until that particular CAT II/III operation is authorized in the operator OpSpecs/LOAs.