

ORDER 8110.115

05/26/11

SUBJ: Certification Project Initiation and Certification Project Notification

This order establishes procedures for aircraft certification offices (ACO) and the directorates, about the notification process they must use when they initiate certification and type validation projects.

This order defines the minimum required information and timelines for that information to be transmitted between the project aircraft certification offices (PACO), accountable directorates, aircraft evaluation groups (AEG), and certificate management aircraft certification offices (CMACO).

ACO, directorate, and AEG offices will develop their own internal working procedures to coordinate their responses to certification projects.

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1. Purpose of this Order. This order explains what information the project aircraft certification office (PACO) is required to transmit when notifying the accountable directorate, the AEG, and the CMACO of new certification projects. It defines responsibilities, timelines and methods for transmission of that information. This order is not intended to address every aspect of certification project coordination (for additional details of the type certification process, see FAA Order 8110.4C, *Type Certification*).

2. Audience. This order is for FAA personnel in ACOs, directorates, AEGs, and ODA units.

3. Where to Find this Order. You can find this order at MYFAA Employee website: <u>https://employees.faa.gov/tools_resources/orders_notices/</u>. This order is available to the public at <u>http://www.faa.gov/regulations_policies/orders_notices/</u> and on the Regulatory and Guidance Library (RGL) website: <u>http://rgl.faa.gov/</u>

4. Effective Date. This order is effective on August 15, 2011.

5. Changes to the Process.

a. The certification project notification (CPN) process in the Federal Aviation Administration's (FAA) Order 8110.4C is replaced by the process in this order. The CPN process is sometimes referred to as "normal directorate notification." Changes to this order, relative to the process described in Order 8110.4C, include:

(1) Clarification that the CPN process must be used for all major changes to type design per Title 14 of the Code of Federal Regulations (14 CFR) § 21.93 regardless of the project code selected or the ACO's initial determination of project significance.

(2) Establishment and clarification of specific data that must be supplied when the ACO notifies the accountable directorate, the AEG, and the CMACO of new certification projects. This order also provides instructions to describe the specific data.

(3) Clarification of the methods that ACOs, directorates, and the AEG use when transmitting CPN data.

(4) Removal of the requirement to use a specific form to transmit CPN data.

(5) Removal of the type design (TD) project type. Major changes to type design per 14 CFR § 21.93 performed by the type certificate (TC) holder are considered redundant with amended type design (AT) project type.

(6) Clarification of the use of certification project types and added definitions for those types.

(7) Removal of the requirement to forward the CPN to a chief scientific technical advisor (CSTA) bulletin board. Any involvement of a CSTA for a specific project that may be necessary

is directly accomplished by the project ACO or accountable directorate. In addition, the National CPN Database can now be used in place of the bulletin board.

(8) Clarification of the roles and responsibilities for the transmission of CPN data.

(9) Addition of ODA holders' direct participation in the transmittal of CPN data when the method for transmitting that data is established with the PACO and the directorates.

(10) Introduction of the National CPN Database and its use by the directorates and AEGs for their responses.

(11) Clarification of the use of certification project codes and added definitions for those codes.

(12) Addition of BASOO (Boeing Aviation Safety Oversight Office) and GASOO (Gulfstream Aviation Safety Oversight Office) to the list of ACO designators.

(13) Removal of the terminology and determination of "Significant Project" and replaced it with a determination of "Directorate Involvement".

b. The following orders also use the CPN process:

(1) FAA Order 8110.4, Type Certification.

(2) FAA Order 8110.101, *Type Certification Procedures for Military Commercial Derivative Aircraft* (Additional notification form required in this order.)

(3) FAA Order 8110.42, Parts Manufacturer Approval Procedures.

(4) FAA Order 8100.15, Organization Designation Authorization Procedures.

(5) FAA Order 8110.54, Instructions for Continued Airworthiness.

(6) FAA Order 8110.56, Restricted Category Type Certification.

(7) FAA Order 8100.5, Aircraft Certification Service: Mission, Responsibilities, Relationships, and Programs.

(8) FAA Order 8110.48, *How to Establish the Certification Basis for Changed Aeronautical Products.*

6. Who Must Use the Processes in This Order.

a. PACOs must use the processes in this order to notify the accountable directorate and the AEG when they begin work on all certification and all type validation projects.

b. Directorates, CMACO (if applicable), and AEGs must use the processes in this order to respond to PACO notification of certification or type validation projects.

7. Responsibilities. This section identifies who receives and transmits the minimum required information and when that information must be transmitted. This minimum required information, referred to as the CPN data, is defined in figure 1 of this order.

a. PACO Responsibilities. The PACO:

(1) Works with ODA holders and the accountable directorate to develop the process for transmitting the CPN data from the ODA holder to the FAA.

(2) Receives applications and requests for certification projects from applicants or ODA holders.

(3) Assigns a project manager to identify the CPN data for which they are responsible using figure 1 of this order for each certification project.

(4) Accurately documents the CPN data for each certification project.

(5) Transmits the CPN data to the accountable directorate and the AEG within 10 working days of receiving an acceptable request for a certification project. CPN data that is entered into the National CPN Database is available to the AEG and need not be sent separately to the AEG.

(6) Notifies the appropriate CMACO, as necessary per appendix C of this order, within 10 working days of receiving an acceptable request for a certification project. When multiple CMACOs require notification, which could be case for AML projects, the PACO notifies all of those CMACOs.

(7) Informs the appropriate CSTA and other appropriate branches of the Aircraft Engineering Division (AIR-100) as early as possible when the proposed design or product change consists of new state-of-the-art systems or components that the FAA has not previously certificated or for which the FAA has not published adequate certification criteria. The CSTA directory can be found at this web site:

<u>http://www.faa.gov/aircraft/air_cert/design_approvals/csta/directory/</u>. The appropriate branch offices of the Aircraft Engineering Division and their areas of responsibility can be found at <u>Aircraft Certification Service - Aircraft Engineering Division</u> (http://www.faa.gov/about/office_org/headquarters_offices/air/hq/engineering/).

(8) Notifies the accountable directorate, the AEG and the CMACO (as applicable) of project changes that could necessitate a directorate re-evaluation of the project with respect to the need for directorate involvement per appendix B or of a "significant change" per 14 CFR § 21.101(a) or (b).

(9) Coordinates aerial dispensing of liquids projects with the Engineering Procedures Office (AIR-110) per FAA Order 8110.4. Also coordinates with AIR-110 on all restricted category/military surplus projects (per FAA Order 8110.56).

(10) Address responses (e.g., additional information request, issue paper request, instructions for continued airworthiness (ICA) request) from the accountable directorate, AEG, and CMACO, as necessary.

b. CMACO Responsibilities. The CMACO:

(1) Receives CPN data from the PACO.

(2) Transmits the CPN data for which they are responsible to the PACO within 10 working days of receiving a CPN.

c. AEG Responsibilities. The AEG makes the determination as to their involvement concerning operational and maintenance evaluations for each certification project. Maintenance evaluations may include review of the ICA or impact assessment. Operational evaluations may include pilot training, type rating requirements, reviewing the aircraft flight manual (AFM), and evaluating master minimum equipment list (MMEL) revision requests. The AEG:

(1) Receives CPN data.

(2) If necessary, makes a request for additional information from the PACO within 10 working days of receiving the CPN data.

(3) Transmits the CPN data for which they are responsible to the PACO within 10 working days of receiving a CPN. If the AEG makes a request for additional information from the PACO, the AEG responds within 10 days of receiving the additional data requested.

d. Accountable Directorate Responsibilities. The accountable directorate:

(1) Receives CPN data.

(2) Enters CPN data into the National CPN Database which has not already been input by the PACO.

(3) Assigns a project officer for projects when a need for directorate involvement has been identified.

(4) If necessary, makes a request for additional information from the PACO within 10 working days of receiving the CPN data.

(5) Transmits the CPN data for which they are responsible to the PACO within 10 working days of receiving the CPN data. If the accountable directorate makes a request for

additional information from the PACO, the directorate responds within 10 days of receiving the additional data requested.

8. Methods of Transmitting CPN Data.

a. The PACO. The PACO transmits the CPN data electronically to the directorate using a method agreed upon between the PACO and directorate. CPN data can be transmitted by the ODA holder if a process has been established between the ODA holder and the FAA.

b. The Accountable Directorate. The accountable directorate enters CPN data which has not already been input by the PACO into the National CPN Database. The accountable directorate responds to project notifications using the National CPN Database.

c. The AEG. The AEG uses the National CPN Database to respond to projects within the CPN Database.

d. The CMACO. The CMACO responds to projects using a method agreed upon by the PACO and the CMACO.

9. Projects That Get Entered into the National CPN Database.

a. New Type Certificate. All new type certificate (TC) projects will be entered into the National CPN Database.

b. Major Type Design Changes. All projects for major type design changes will be entered into the National CPN Database (e.g., AT, ST, SA. See appendix A, table 1 for codes).

c. Parts Manufacturer Approvals. Parts manufacturer approval (PMA) projects for critical/life-limited parts will be entered into the national CPN database. For other PMA projects, the accountable directorate will determine if the project needs to be entered into the National CPN Database.

d. Special Projects. SP projects are not certification projects, and therefore do not have to be entered into the National CPN Database.

10. Required CPN Data. The CPN data requirements are summarized in figure 1 and detailed in paragraph 10 in this order. This CPN data represents the minimum required data that must be communicated between ACOs, directorates, and the AEG when PACOs initiate a certification project.

a. The CPN data in figure 1 must be provided using paragraph 10 in this order, unless specified "Optional." When the "Required Information" column in figure 1 lists values, the data provided must be one of the values listed.

b. Any date field must include month, day, and year.

c. When the name of an FAA person is required, specify the name as it appears in the FAA directory. For example, specify as "Jane Doe" or as "John C Doe". When a middle initial is needed, do not place a period after it. Do not include any additional information in these fields that are not part of the name as it appears in the FAA directory such as titles like Mr., Mrs., Jr., Sr., job titles such as Manager, organization management team (OMT) lead, or phone numbers, organization name, etc.

d. For name fields that allow for multiple entries, separate each name by a comma. For example: "Jane Doe, John C Doe".

Figure 1. Summary of Required CPN Data

PART A

Part A is the minimum data to be transmitted from the PACO to the directorate, the AEG and the CMACO.

Data Description	Summary of Required Information (See paragraph 10 for the full explanation of the allowable data parameters)
Project Number	Unique FAA Project Number using the Project Numbering System in appendix A or unique Delegated Organization number.
Project ACO (PACO)	AC, AK, AT, BA, BO, CE, CH, DE, EN, GU, IB, LA, MC, NY, RC, SC, SE, WI (See appendix A, table 2, for code description.)
Project Title	(Optional) A short phrase describing the project.
Model(s)	Models that are already identified on a TCDS or expected to be identified on a TCDS.
Project Description Brief but detailed description of the project.	
Applicant Name	Name of applicant as it is expected to appear on a certificate or already appears on a certificate.
Applicant Address	Street, City, State, Postal Code and Country of applicant
Applicant POC	(Optional) Contact information for the applicant's point of contact (POC) person.
Date of Application	Enter a date to include month, day and year.
Expected Completion Date	Enter a date to include month, day and year.
Project Type	TC, ST, AT, SA, SP, PM (See appendix A, table 1 for code description.)
Product Type	A, B, E, G, P, R, S, T, I, Q (See appendix A, table 3 for code description.)
Is PMA for Critical/Life-Limited Part?	Yes, No.

Figure 1. Summary of Required CPN Data (continued)

Data Description	Summary of Required Information
Project Manager	Name as specified in the FAA directory.
Project Engineer	(Optional) For FAA employees, enter name(s) as specified in the FAA directory listing. For ODAs, enter exact email address(es).
Has the ACO identified a potential need for Directorate Involvement from Appendix B?	Yes, No.
Does the ACO consider this a significant product change per 14 CFR § 21.101?	Yes, No, NA.
CMACO Coordination	Yes, No.
Accountable Directorate	EPD, RCD, SAD, TAD (See appendix A, table 4 for code description.)
AEG Office	BOS-AEG, FTW-AEG, MKC-AEG, LGB-AEG, SEA-AEG (See appendix A, table 5 for code description.)
CMACO Office	AC, AK, AT, BA, BO, CE, CH, DE, EN, GU, IB, LA, MC, NY, RC, SC, SE, WI (See appendix A, table 2, for code description.)
Reference Certificate	(Optional) The TC or STC number of the certificate being created or amended.

PART A (continued)

Figure 1. Summary of Required CPN Data (continued)

PART B

Part B is the minimum data to be transmitted from the accountable directorate to the PACO.

Data Description	Summary of Required Information
Date CPN data received	Enter a date to include month, day and year.
Project Officer	Name as specified in the FAA directory.
Date of Directorate Response	Enter a date to include month, day and year.
Is Directorate Involvement Required?	Yes, No, to be determined (TBD).
Does the Directorate consider this a significant product change per 14 CFR § 21.101?	Yes, No, TBD, NA.
Is signature authority delegated to the PACO?	Yes, No.
Directorate Comments/Requests	Optional.

PART C

Part C is the minimum data to be transmitted from the AEG to the PACO.

Data Description	Summary of Required Information
AEG Representative	Name(s) as specified in the FAA directory.
Date of AEG Response	Enter a date to include month, day and year.
AEG Involvement	Yes, No.
AEG Comments/Requests	

Figure 1. Summary of Required CPN Data (continued)

PART D

Part D is the minimum data to be transmitted from the CMACO to the PACO.

Data Description	Summary of Required Information
CMACO Contact	Name as specified in the FAA directory.
Date of CMACO Response	Enter a date to include month, day and year.
Is CMACO Involvement	Yes, No.
Required? CMACO Comments/Requests	Optional.
CIVIACO Comments/ Requests	Optional.

11. CPN Data Table Detailed Instructions. This section is a detailed explanation of the information required to complete the CPN Data Table in figure 1.

a. Project Number. The PACO assigns a unique project number when they receive an application for a validation, an application for a new certificate, or for any major change to type design.

(1) The assigned project number can not duplicate another project number contained in the National CPN Database.

(2) Only one project number must be assigned for each project.

(3) Assign the project number according to the Project Number System in Appendix A of this order, or

(4) For certification projects initiated by ODA holders, assign a unique project number. If an FAA project number has also been identified for the project, then assign only one of those numbers and reference the other number in the Project Description.

b. Project ACO (PACO). The PACO identifies their office (the one working the certification project) using the two-letter designator for their office. (See appendix A, table 2 for aircraft certification office designators.)

c. Project Title. (Optional) A short phrase describing the project.

d. Models. The PACO lists the aircraft, engine, or propeller models proposed to be changed or added to a type certificate.

(1) The models listed must be those that are already identified on a TCDS, or are expected to be identified on a TCDS.

(2) The models can not be marketing names.

(3) The models must be products within the authority of the identified accountable directorate for each project.

(4) If the changes are for an approved model list (AML) STC, identify all models to be added to the AML or provide an attachment to the CPN data containing a list of the model(s).

e. **Project Description.** The PACO provides a detailed, but brief description of the project. This description must identify and reference the proposed type design changes that involve any of the criteria for determining directorate involvement given in appendix B of this order.

f. Applicant Name. The PACO specifies the name of the applicant. This name corresponds to the name that appears, or is expected to appear, on the certificate to be created or amended.

g. Applicant Address. The PACO specifies the physical address of the applicant and provides the street, city, state, postal code, and country (if other than the United States) where the applicant conducts business.

h. Applicant Point of Contact. (Optional) This information may include the name of a contact, and the means of contact such as telephone, fax number, and email address.

i. Date of Application. The PACO specifies the month, day and year the applicant applied for the type design change or applied for the new or changed certificate.

j. Expected Completion Date. The PACO specifies the month, day and year when the applicant expects to be issued a certificate or an approval.

k. Project Type. The PACO identifies the applicable project type for each project using a twoletter designator (see appendix A, table 1 for codes).

I. Product Type. The PACO identifies the applicable product type for each project using the one-letter designator (see appendix A, table 3 for codes).

m. Is PMA for Critical/Life-Limited Part? The PACO indicates the part criticality by reviewing the applicant's assessment of the consequences of PMA part failure on the next higher assembly and associated product in accordance with the latest revision of FAA Order 8110.42. The PACO answers:

(1) "Yes" if the part is Life Limited and/or considered a critical part, or

(2) "No" if the part is not Life Limited and not critical or if the certification project is not a PMA project.

n. Project Manager. The PACO provides the name of the project manager.

o. Project Engineer. (Optional) The PACO provides the name of the engineer assigned to support the project manager. For less involved projects, the PACO may choose to not assign a separate project engineer. The PACO may also choose to use this field to identify other person(s) with whom the CPN is to be coordinated. For example, the ODA holder's focal point or an FAA administrative assistant for the project could be listed here if the PACO chooses.

p. Has the ACO identified a potential need for Directorate Involvement from Appendix B? The ACO determines the potential need for accountable directorate involvement in a project based on the criteria in appendix B. The accountable directorate ultimately decides their involvement in a project. The PACO answers:

(1) "Yes" if the project or proposed design changes meet any of the criteria given in appendix B of this order, or

(2) "No" if the proposed changes do not meet any of the criteria given in appendix B.

q. Does the ACO consider this a significant product change per 14 CFR § 21.101? FAA Order 8110.48 provides policy to assist with the "Yes" or "No" determination. FAA Advisory Circular (AC) 21.101, *Establishing the Certification Basis of Changed Aeronautical Products*, provides one method of compliance that applicants may use and is also guidance to assist the FAA engineer in this determination. The accountable directorate will ultimately decide if the change is significant or not, regardless of whether the PACO agrees or disagrees. The PACO answers:

(1) "Yes" if they consider the proposed product change to be significant per 14 CFR 21.101(b)(i) or (ii),

(2) "No" if they consider the proposed product change to be not significant per 14 CFR 21.101(b)(i) or (ii), or

(3) "NA" if the applicant is proposing to comply with all the regulatory amendments in effect on the date of the application for the change per the intent of 14 CFR § 21.101 as indicated by the applicant's proposed certification basis.

r. CMACO Coordination. The PACO must coordinate with the CMACO that manages the product Type Certificate (TC) if the project is of a type listed in appendix C of this order. The PACO answers "Yes" or "No" if the proposed changes do or do not involve any one of the project types listed in Appendix C.

s. Accountable Directorate. The PACO specifies the directorate that is accountable for the project. The accountable directorate is the directorate that will receive the project notification based on the product type. The PACO will not assign more than one accountable directorate to a project. Specify:

(1) Engine and Propeller Directorate (EPD) for product types E and P,

- (2) Rotorcraft Directorate (RCD) for product type R,
- (3) Small Airplane Directorate (SAD) for product types A, B, G, and S,
- (4) Transport Airplane Directorate (TAD) for product type T.

t. AEG Office.

(1) The PACO identifies the name of the responsible AEG office (see appendix A, table 5 for code description).

(2) AEG offices and areas of responsibility can be found at: <u>http://www.faa.gov/about/office_org/field_offices/aeg/</u>

u. CMACO Office. The PACO identifies one CMACO office by specifying the two-letter designator for the office (see appendix A, table 2). The CMACO needs to be specified only if the answer to item "CMACO Coordination" above is "Yes".

v. Reference Certificate. (Optional) The TC or STC number of the certificate being created or amended by this project.

w. Date CPN Data Received. The accountable directorate enters the month, day, and year when they received the CPN data from the PACO.

x. Project Officer. The accountable directorate specifies the name of the assigned project officer. The accountable directorate must assign a project officer for projects where they have determined their involvement is required.

y. Date of Directorate Response. The accountable directorate provides the date they returned their certification notification response to the PACO.

z. Is Directorate Involvement Required? The accountable directorate reviews the project information provided by the ACO and then decides whether directorate involvement is required for the project. The accountable directorate will ultimately decide their involvement regardless of the ACO's determination. The accountable directorate may also recognize their need for involvement based on appendix B in this order. The accountable directorate answers:

(1) "Yes" if the accountable directorate requires involvement with the project,

(2) "No" if the accountable directorate anticipates no further involvement with the project,

(3) "TBD" if more information is required before this determination can be made.

aa. Does the directorate consider this to be a significant product change per 14 CFR § 21.101? FAA Order 8110.48 provides policy to assist with the "Yes" or "No" determination. FAA AC 21-101, provides one method of compliance that applicants may use and is also guidance to assist the FAA engineer in this determination. The accountable directorate will ultimately decide the change is significant or not, regardless of whether the PACO agrees or disagrees. The accountable directorate answers:

(1) "Yes" if they consider the proposed product change to be significant per 14 CFR 21.101(b)(1)(i) or (ii),

(2) "No" if they consider the proposed product change to be not significant per 14 CFR 21.101(b)(1)(i) or (ii),

(3) "TBD" if more information about the project is required before this determination can be made,

(4) "NA" if the applicant is proposing to comply with all the regulatory amendments in effect on the date of the application for the change per 14 CFR § 21.101(a) as indicated by an "NA" response by the ACO in Part A of table 1.

bb. Is Signature Authority delegated to the PACO? The accountable directorate answers "Yes" or "No". When the accountable directorate indicates "No" they must address the reasons that signature authority is being withheld in the Directorate Comments/Requests.

cc. Directorate Comments/Requests. (optional) The accountable directorate provides comments and/or requests for further information. The accountable directorate should explain the basis for any disagreement with the ACO determinations in Part A.

dd. AEG Representative(s). The AEG provides the name(s) of the AEG representative(s) who will be involved with the project.

ee. Date of AEG Response. The AEG provides the month, day, and year they returned their certification notification response to the PACO.

ff. AEG Involvement? The AEG answers:

(1) "Yes" if AEG required involvement is beyond ICA review, or

(2) "No" if AEG reviews ICA only.

gg. AEG Comments/Requests. The AEG provides any comments and/or requests for further information.

hh. CMACO Contact. The CMACO provides the name of the engineer assigned as the project lead for the CMACO.

ii. Date of CMACO Response. The CMACO provides the date they returned their CPN response to the PACO.

jj. Is CMACO Involvement Required? The CMACO answers "Yes" or "No" to indicate their need for involvement.

kk. CMACO Comments/Requests. (optional) The CMACO representative enters comments and/or requests for further information.

Appendix A. Project Numbering and Designators

FAA Project Numbering System Used in Figure 1:

FAA Project Numbers will use the following format:

AAnnnnYY-X

Where:

- AA is the two-letter designator for Project Type see table 1 below.
- nnnnn is the integer sequential number for the specified ACO; e.g., 00146.
- YY is the two-letter designator for the Aircraft Certification Office (ACO) see Table 2 below.
- X is the one-letter designator for the Product Type see table 3 below.

As an example, TC00125AT-A would be a TC project assigned by the Atlanta ACO on a small airplane with the assigned number 00125.

Table 1 – Project Type Designators

Code	Description
TC	New Type Certificate (TC)
ST	New Supplemental Type Certificate (STC)
AT	Amended Type Certificate
SA	Amended Supplemental Type Certificate
SP	Special Project (e.g. approval under §21.305 project)
PM	Parts Manufacturer Approval (PMA)

Code	Branch	Description
AC	ASW-150	Ft. Worth Airplane Certification Office
AK	ACE-115N	Anchorage Aircraft Certification Office
AT	ACE-115A	Atlanta Aircraft Certification Office
BA	ANM-100B	Boeing Aviation Safety Oversight Office (BASOO)
BO	ANE-150	Boston Aircraft Certification Office
CE	ACE-112	Small Airplane Directorate
CH	ACE-115C	Chicago Aircraft Certification Office
DE	ANM-100D	Denver Aircraft Certification Office
EN	ANE-140	Engine Certification Office
GU	ACE-100G	Gulfstream Aviation Safety Oversight Office (GASOO)
IB	ANM-116	Transport Airplane Directorate International Branch
LA	ANM-100L	Los Angeles Aircraft Certification Office
MC	ACE-100M	Military Certification Office
NY	ANE-170	New York Aircraft Certification Office
RC	ASW-170	Ft. Worth Rotorcraft Certification Office
SC	ASW-190	Ft. Worth Special Certification Office
SE	ANM-100S	Seattle Aircraft Certification Office
WI	ACE-115W	Wichita Aircraft Certification Office

Table 3 – Product Type Designators

Code	Description
А	Small Airplane
В	Balloon
E	Engine
G	Glider
Р	Propeller
R	Rotorcraft
S	Airship
Т	Transport Airplane
Ι	Experimental
Q	Other, or not product

Table 4 - Directorate Designators

Code	Description
EPD	Engine-Propeller
RCD	Rotorcraft
SAD	Small Airplane
TAD	Transport Airplane

Code	Description
BOS-AEG	Boston AEG
FTW-AEG	Fort Worth AEG
MKC-AEG	Kansas City AEG
LGB-AEG	Long Beach AEG
SEA-AEG	Seattle AEG

Table 5 - Aircraft Evaluation Group Designators

Appendix B. Determination of Directorate Involvement

1. Determination of Directorate Involvement. The ACO makes the initial determination as to whether they anticipate directorate involvement in a project using the criteria listed below. These criteria are used to enhance the project description and serve to alert the accountable directorate of the potential for further directorate involvement. The final determination as to whether the directorate is involved in a project is ultimately made by the accountable directorate.

2. Criteria used to Determine the Potential Need for Directorate Involvement. The ACO will use the following criteria to determine if there is potentially a need for directorate involvement in a project:

a. Any new TC application.

b. Any application for an STC, amended TC, amended STC, or a type design change in which:

(1) The design appears to require special conditions, exemptions, or equivalent safety findings, or the ACO determines it to be a significant change per 14 CFR § 21.101.

(2) The design uses novel or unusual features.

(3) The design changes the kinematics, dynamics, or configuration of either the flight control or rotordrive system.

(4) The design change would substantially alter the aircraft's flight characteristics.

Note: For project description purposes, the FAA considers flight items for which compliance can be qualitatively recorded or documented to be nonsubstantial. However, the accountable directorate may opt to participate in flight testing.

(5) The design change affects an area that has been the subject of a major service difficulty or accident.

(6) The design changes the engine configuration from reciprocating to turbopropeller or turbojet-powered, or changes from one engine or propeller model to a different engine or propeller model. (This does not include dash number changes for minor variations in configuration).

(7) The design affects the integrity of the basic load-bearing structure necessary for continued safe flight and landing, or operation of the aircraft within approved limits.

(8) The design consists of new state-of-the-art systems or components that the FAA has not previously certificated or for which the FAA has not published adequate certification criteria.

(9) The certification is likely to be controversial or highly visible.

(10) The design change is for a small airplane with seating capacity of six (6) or more with a reasonable potential for use in a 14 CFR part 135 operation, and affects operational aspects of the airplane such as those which would require flight testing and/or revisions to the airplane flight manual (AFM) or maintenance manual.

(11) The part 23 certification involves an approved model list (AML).

c. Each directorate may also have additional criteria used to identify specific issues in which their involvement may be required. For example, the Transport Airplane Directorate maintains the Transport Airplane Issues List, which can be found at:

(http://www.faa.gov/aircraft/air_cert/design_approvals/transport_intl/)

Appendix C. PACO to CMACO Coordination

PACO must coordinate the types of projects listed below with CMACO.

1. General.

a. Any STC, PMA or repair that affects or replaces a critical or life limited structural or engine part, such as landing gear, thrust reversers, gear boxes, rotating engine parts, pistons, connecting rods, engine block, and head.

- **b.** Modifications to empty/zero fuel weight.
- c. Externally mounted equipment (excluding antennas).
- d. Type Design Change affecting existing airworthiness directive (AD) compliance.

2. Engine/Prop/Fuel System/ Auxiliary Power Unit (APU).

- **a.** Change in type or power rating of engine.
- **b.** Propeller/propeller control replacement.
- c. Propeller installations that affect gear box/changes to mass balance.
- d. APU and APU compartment modifications.
- e. Fuel system modifications.
- f. Change to electronic engine controls or instruments.
- g. Nacelle modifications.

3. Electrical/Avionics/Software.

- **a.** Software modifications that affect critical systems.
- **b.** Electrical modifications to aircraft with full authority digital engine control (FADEC) engines.
- c. Single pilot instrument flight rules (IFR) certification modifications.

d. New/novel avionics packages (for example, glass cockpit, engine indicating and crew alerting system (EICAS).

e. Electrical modifications powered from systems having automatic load shedding features.

4. Systems.

- **a.** Major changes to fire detection/suppression systems.
- **b.** Hydraulic flight controls/autoland status annunciator system (ASAS).
- **c.** Icing protection systems.

5. Rotorcraft. Rotorcraft modifications affecting loads/vibration/fatigue/damage tolerance characteristics of main and tail rotor system/transmission system/gear box/main and tail rotor blades.

6. Structural.

- a. Installation of cargo doors, passenger to cargo conversions.
- **b.** Changes to any primary or critical structure, including flight control surfaces.
- c. Assessment of flyable cracks in structure.

7. Discretionary CMACO Project Participation. For projects not involving the changes listed in this appendix, the PACO may still choose to request CMACO participation at the beginning of the project.

Appendix D. Definitions and Acronyms

1. Definitions.

a. Certification Project. The processes, methods, and coordination the FAA uses to issue new and amended type certificates and to approve major changes to type design. Certification projects are initiated by the ACO or ODA holder. A certification project is also a type validation project for the purposes of this order and may be initiated by the directorate. Certification projects include:

- (1) New type certificate (TC) projects,
- (2) Amended type certificate projects,
- (3) New supplemental type certificates projects,
- (4) Amended supplemental type certificate projects,
- (5) Parts manufacturer approval projects, and
- (6) Special projects.

b. Amended TC (AT) Project. A certification project that will lead to an approval of a new aircraft, engine or propeller model by adding the new product to an existing type certificate, or amends the existing type certificate. This project designator is used for major changes to type design whether or not the type certificate is physically altered. Only the holder of the TC may apply for an amended TC.

c. Amended STC (SA) Project. A certification project that will lead to the amendment of an existing supplemental type certificate. This project designator is used for major changes to type design whether or not the supplemental type certificate is physically altered. Only the holder of the STC may apply for an amended STC.

d. Certificate Management ACO (CMACO). The ACO managing the product's type certificate (TC). For the purposes of this order, the CMACO is not the certificate management office of the STC.

e. Certification Project Notification (CPN). The term used to describe the notification that the PACO gives to the accountable directorate, AEG, or CMACO that there is a new certification project.

f. CPN Data. The data defined in accordance with table 1 of this order that is documented and transmitted for the initiation of each certification project.

g. CPN Process. The process of notification and response when CPN data is sent by the PACO to the accountable directorate, the AEG, and the CMACO.

h. National CPN Database. The National CPN Database is a web-based program used by each accountable directorate and the AEG to respond to the CPNs and to log CPN data.

i. Special Project. A certification project that is not a TC, STC, amended TC, amended STC, or PMA project.

2. List of Acronyms.

14 CFR	Title 14 of the Code of Federal Regulations
AC	Advisory circular
AD	Airworthiness directive
ACO	Aircraft certification office
AEG	Aircraft evaluation group
AFM	Aircraft flight manual
AML	Approved model list
AT	Amended type design
CMACO	Certification management aircraft certification office
CPN	Certification project notification
CSTA	Chief scientific technical advisors
FAA	Federal Aviation Administration
IFR	Instrument flight rules
ODA	Organization designation authorization
PACO	Project aircraft certification office
PMA	Parts manufacturer approval
POC	Point of contact
RGL	Regulatory and guidance library
STC	Supplemental type certificate
ТС	Type certificate
TCDS	Type certificate data sheet
TD	Type design

Appendix E. Administrative Information

1. Distribution. Distribute this order to the branch level in Washington headquarters, branch levels of the Aircraft Certification Service; the branch levels of the regional aircraft certification directorates; branch level of International Policy Office; all aircraft certification offices (ACO); aircraft evaluation groups, and chief scientific and technical advisors.

2. Authority to change This Order. The issuance, revision, or cancellation of the material in this order is the responsibility of the Certification Procedures Office (AIR–110).

3. Suggestions for Improvement. If you find deficiencies, need clarification or want to suggest improvements to this order, send FAA Form 1320-19, Directive Feedback Information, (written or electronically) to the Aircraft Certification Service, Administrative Services Branch, AIR-530, Attention: Directives Management Officer. You can also send a copy to the Aircraft Engineering Division, AIR-100, Attention: Comments to Order 8110.115. If you urgently need an interpretation, contact the Engineering Procedures Office, AIR-110, at 202-385-6312. Always use Form 1320-19, in appendix F to follow up each verbal conversation.

4. Records Management. Refer to Orders 0000.1, FAA Standard Subject Classification System; 1350.14, Records Management; and 1350.15, Records, Organization, Transfer, and Destruction Standards; or your office Records Management Officer or Directives Management Officer for guidance regarding retention or disposition of records.

Appendix F. FAA Form 1320-19 Directives Feedback Information Form



Federal Aviation Administration

Directive Feedback Information

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

Subject: Order	8110.115	

To: Directive Management Officer, AIR-510

(Please check all appropriate line items)

□ An error (procedural or typographical) has been noted in paragraph ______ on page ______.

- □ Recommend paragraph _____ on page _____ be changed as follows: (attach separate sheet if necessary)
- □ In a future change to this directive, please include coverage on the following subject: (briefly describe what you want added)

□ Other comments:

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

Submitted by:	 Date:	
•		

FTS Telephone Number: ______ Routing Symbol: _____

FAA Form 1320–19 (dated 10/98)