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Designated Engineering Representatives (DER)		Revision 1
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1. OBJECTIVE

- 1.1. The objective of this procedure is to define:
 - 1.1.1. Designated Engineering Representatives (DER) responsibilities – general and specific;
 - 1.1.1.1 Data approval requirements;
 - 1.1.1.2 Major and minor repair approval requirements;
 - 1.1.2. DER qualification requirements;
 - 1.1.3. DER appointment policy and procedure;
 - 1.1.4. DER orientation procedures;
 - 1.1.5. DER oversight and renewal (or termination) policy;
 - 1.1.6. Functions and responsibilities of Administrative DER's.
- 1.2. This procedure cancels procedure PL 4.1.11.
- 1.3. This procedure replaces procedure PL 4.1.020.

2. GENERAL

- 2.1. In order to expedite the review and approval of engineering data pertaining to type certification, CAAI may, at its discretion, delegate a portion of its authority to qualified individuals, mutually acceptable to the industry and CAAI, by appointing them to act as Designated Engineering Representatives.
- 2.2. Designated engineering representatives will have their delegated authorities restricted to those functions which are in line with their expertise and their occupation. The relevant areas of expertise will be noted in their "Certificate of Authority"

3. Reference Materials & Forms

- 3.1. Reference:
 - 3.1.1. CAAI procedure ENG 1.4.16 - Introduction of Design Changes to Type Certificated Aircraft.

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3.1.2. FAA order 8110.37B - Designated Engineering Representatives Guidance Handbook.

3.1.3. Israeli Air Navigation Rules (ANR) (CAA Representatives), 1981.

3.2. Forms:

3.2.1. CAAI form 8000-5 – Certificate of Designation

3.2.2. CAAI form 8110-25 – DER Certificate of Authority.

3.2.3. CAAI form 8110-3 - Statement of Compliance.

3.2.4. CAAI form 8110-37A - DER Performance Evaluation Form.

3.2.5. CAAI form 8110-37B - DER/CAAI Interaction Tracking Form.

3.2.6. CAAI form K.A. 1618 - STATEMENT OF QUALIFICATIONS (DMIR-DER)

4. **DER Responsibilities**

4.1. In performing the tasks described in this procedure, DERs perform their duties as representatives of CAAI.

4.2. DER's activities are only concerned with the technical review and approval of type design and design changes related to their employer's product. In approving engineering data within the DER's limits of authority, the DER is finding compliance with appropriate CAAI airworthiness requirements.

4.3. These requirements include, but are not limited to CAAI Air Navigation Regulations, special conditions, exemptions, and other requirements that have been adopted or accepted by the CAAI.

4.4. All requirements, instructions, regulations and procedures applicable to CAAI engineers, are also applicable to DERs in performing similar duties.

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- 4.5. Each DERs performance will be reviewed by relevant CAAI engineers who may also sample check DERs compliance findings.
- 4.6. DERs may not use their personal stamp for any purpose not related to their delegated functions as DERs on their company's internal documents.
- 4.7. DERs will periodically report their activities to their CAAI monitoring engineer.

5. **DER Specific Responsibilities**

- 5.1. Each DER is authorized only within the specialized areas of expertise designated by CAAI.
- 5.2. The designation may be in one or more of the following areas of expertise:
 - 5.2.1. Structural Engineering;
 - 5.2.2. Damage Tolerance and Fatigue Engineering;
 - 5.2.3. Loads and Flutter Engineering;
 - 5.2.4. Powerplant Engineering;
 - 5.2.5. Mechanical Systems Engineering;
 - 5.2.6. Electrical Systems and Avionics Engineering;
 - 5.2.7. Software Engineering;
 - 5.2.8. Cabin Safety Engineering;
 - 5.2.9. Avionics Engineering;
 - 5.2.10. Propeller Engineering;
 - 5.2.11. Flight Analysis Engineering;
 - 5.2.12. Flight Test Pilot.
 - 5.2.13. Additional areas of expertise, or a specific section within a listed area, may be designated.

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- 5.3. An Engineering Representative may prepare and/or approve, or recommend for approval the following, in his designated area of expertise:
- 5.3.1. Engineering Reports;
 - 5.3.2. Drawings;
 - 5.3.3. Material Specifications and Process Specifications;
 - 5.3.4. Test Plans and Test Results;
 - 5.3.5. Test Witnessing;
 - 5.3.6. Other data, provided these items comply with the pertinent regulations.
- 5.4. The extent of activity, including approvals or recommendations for approval should be coordinated with the Certification Project manager and the CAAI monitoring engineer in the relevant area of expertise.
- 5.5. Approving engineering data:
- 5.5.1. Where more than one area of expertise is involved in a specific design approval, this data must be presented to all relevant DER's and/or all relevant CAAI engineers for review and approval. The overall approval will then be issued by CAAI, or the DER assigned to that particular project.
 - 5.5.2. Within the DER designation, each DER is authorized to approve engineering data only when that data is in full compliance with the applicable airworthiness regulations as defined in the project Certification Basis.
 - 5.5.3. Whenever any question arises of whether the engineering data is in full compliance with regulations, wherever interpretation of regulations is not clear, or where the applicant requests an exemption or an

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equivalent safety finding, the DER must refer the matter to CAAI for consultation and resolution.

5.5.4. DERs may approve data prepared by other engineers working for the same employer, under the DER's jurisdiction and guidance.

5.5.5. DER approval constitutes his personal assurance that the data has been properly reviewed, and that it demonstrates that the design complies with applicable regulations.

5.6. Witnessing Tests

5.6.1. DERs are not authorized to conduct or witness official certification tests, without prior coordination with CAAI.

When obtaining this prior authorization, the DER must:

5.6.1.1 Define whether such tests are to show compliance with specific certification requirements (official CAAI test), or to collect test data as part of the overall substantiation effort.

5.6.1.2 Determine whether the CAAI wishes to witness these tests.

5.6.1.3 Discuss with CAAI Engineering department Manager tests involving controversial qualitative judgments, to define the extent of participation by the CAAI.

5.6.1.4 Verify that the necessary CAAI conformity inspections have been accomplished prior to conducting type certification tests.

5.6.2. The DER is not required to witness an entire test to approve the test data. However, the DER should witness those portions of the test dealing with critical conditions to insure that the data is valid.

5.7. Approving test data:

5.7.1. A DER who is not authorized to approve test data may be authorized to recommend CAAI approval of test data within a CAAI approved test program.

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5.7.2. By approving test data, the DER states that those portions of the test dealing with critical conditions have been witnessed by the DER, that the test was conducted in accordance with the CAAI approved test program, and that the data are official test results.

5.8. Performing tests:

5.8.1. A Flight Test pilot DER is required to perform all tests on which the DER intends to approve or recommend approval of the data.

5.8.2. By approving test data, the Flight Test Pilot DER states that he has performed the tests, that the tests were conducted in accordance with the approved test plan, and that the data are official test results.

5.9. DERs are responsible for recommending mandatory special inspections to CAAI, or mandatory changes to the approved type design where service experience indicates that such actions may be essential to avoid an unsafe condition.

5.10. A DER's approval, when performed according to the limitations of his authority, constitutes CAAI's approval.

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6. Method of Data Approval

- 6.1. Each DER may only approve data that was designated for DER approval, and that falls within his designation.
- 6.2. The DER may use as many experienced engineers as needed to completely evaluate engineering technical data. However, the DER accepts the responsibility for approving the technical data when signing CAAI Form 8110-3.
- 6.3. A DER may decline to approve any or all portions of the technical data, and may forward such data to CAAI for approval. In such instances, the DER must specify reasons for declining to approve the technical data.
- 6.4. The DER should communicate early and often with his CAAI engineering counterpart to resolve this matter.
- 6.5. DERs will approve each drawing Engineering Order (E.O.) by stamping the E.O. with their personal stamp.
- 6.6. DER's approvals must bear their name, date and signature.
- 6.7. Copies of approved E.O.s must be submitted to CAAI for follow up.
- 6.8. In some cases, a DER may personally evaluate and approve technical data. In other cases, a DER may ensure the proper evaluation of technical data by other persons, then the DER will approve that data by certifying that the data complies with the applicable regulations.
- 6.9. CAAI Form 8110-3 (Statement of Compliance) will be issued only for compliance findings of design drawings and reports required as "Means of Compliance" by the CAAI approved project Compliance Check List (CCL).
- 6.10. CAAI Form 8110-3 is an internal CAAI document and should not be released to the applicant.

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- 6.11. CAAI notification to the applicant of data or document approval will be by CAAI DASR (Document Approval Status Report).

7. Method of Approving Design Changes and Repairs

- 7.1. CAAI Designees (DERs) can be authorized to review, recommend for approval, or approve design changes or repairs within their delegated discipline.
- 7.2. CAAI DERs shall determine whether the relevant design change should be classified as major or minor.

Design changes are classified as defined in CAAI procedure ENG 1.4.16. In many cases, a clear-cut line of differentiation between “major” and “minor” is extremely difficult. Whenever any question of classification arises, or interpretation is not clear, the DER must refer the matter to CAAI for consultation and resolution.

- 7.3. For repairs and changes performed by persons or organizations who are not the TC holder of the affected product, the DER can act only with specific CAAI concurrence for that project, and according to the relevant repair station procedures.
- 7.4. Major design changes require the development of appropriate substantiating technical data. This can be done in the framework of a design change approval for the approval holder, an amendment to the approval, an STC, or a field approval for persons or organizations other than the approval holder .
- 7.4.1. DERs may approve major design changes, in accordance with the listed restrictions and limitations in each DER’s Certificate of Authority, with specific coordination with his supervising CAAI engineer.
- 7.4.2. Consideration may be given to previously approved data, in the development of substantiating technical data.
- 7.4.3. For major repairs and alterations which require development of substantiating data when no previously

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approved data is on hand, the developed data may be approved only by CAAI Engineers.

In these cases DERs may only “Recommend for Approval”.

- 7.5. Minor design changes do not require prior CAAI engineering approvals and may be approved by the design approval holder’s engineers in accordance with the design approval holder’s CAAI approved procedures.

8. DER Qualification Requirements

8.1. GENERAL REQUIREMENTS

- 8.1.1. Applicants must be employed by, and recommended by a manufacturer, an air carrier, or a certificated repair station, and have a position in the employer's organization free from any conflicting restraints, but with sufficient authority to enable the applicant to administer the pertinent regulation(s) effectively.
- 8.1.2. Applicants should have a thorough working knowledge of the pertinent regulations (CAAI ANRs, FAA FARs), guidance, and advisory material.
- 8.1.3. Applicants must have acceptable experience in a responsible position related to the type of work for which the designation is being sought, and is cognizant of the relevant technical requirements and problems related to civil aircraft certification, or has otherwise demonstrated suitability for this designation .
- 8.1.4. The applicant must have the basic engineering knowledge appropriate to the designation being sought, as demonstrated by eight years of progressively responsible engineering experience. An engineering

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degree may be substituted for up to 4 years of experience.

- 8.1.5. Applicants should possess integrity, sound judgment, and a cooperative attitude.
- 8.1.6. A good command of the English language, both oral & written, is required.
- 8.1.7. Candidates must have had attended classroom basic training for Designees (functions and responsibilities), and have had successfully completed the final examinations.
- 8.1.8. Applicants should have at least one year of experience in a direct working relationship with the CAAI in which the applicant was continuously and actively engaged in the processing of engineering work for CAAI approval of the type in which the applicant is seeking appointment.
- 8.1.9. The experience in direct contact with the CAAI may be part of the eight year requirement, and should have occurred during the last 3 years prior to the application for DER appointment.
- 8.1.10. The applicant's experience must demonstrate to the CAAI that the applicant is technically competent to successfully solve engineering problems within the scope of the designation requested.

8.2. SPECIFIC REQUIREMENTS

8.2.1. For a *structural DER* with a delegated function of Damage Tolerance Evaluation or Fatigue Analysis, the applicant should possess the following basic education:

- 8.2.1.1 A degree in Mechanical Engineering; or
- 8.2.1.2 A degree in Aerospace/Aeronautical Engineering; or
- 8.2.1.3 A degree in Civil Engineering.

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8.2.1.4 In addition to the above, a course in Fracture Mechanics (for DER candidates who will be involved in Damage Tolerance evaluation) or a course in Fatigue Analysis (for DER candidates who will be involved in Fatigue analysis) is desirable, if this course was not taken during the degree program.

8.2.2. For a flight test pilot designation, the candidate should:

8.2.2.1 Hold a commercial pilot's certificate with instrument rating and be qualified in aircraft of the same category and class, and similar in design to that in which the applicant will be conducting tests.

8.2.2.2 Be a licensed test pilot.

8.2.2.3 Have logged a minimum of 2,000 Pilot-In-Command (PIC) flying hours (1,000 hours for helicopters) of which at least 100 hours have been logged within the last 12 months.

8.2.2.4 Have logged a minimum of 100 hours of appropriate experimental flight testing experience in the same certification category and in a similar type of aircraft for which the DER appointment is requested.

Note: The requirements of 8.2.2.3 & 8.2.2.4 are initial requirements, not recurring annual requirements.

9. DER Appointment Procedure

9.1. Application

9.1.1. Application for appointment as a DER must be initiated by the applicant or the applicant's employer (in the case of a company DER) by submitting a complete CAAI Form K.A.1618 "Statement of Qualifications", along with a cover letter.

9.1.2. The application cover letter must indicate which of the delegated functions and authorized areas of expertise are being applied for. It should also include a detailed resume highlighting any CAAI certification compliance activity and specifying previous technical work done, including the level of responsibility, of the applicant.

9.1.3. The candidate's application, along with the company's cover letter, must be submitted for review by the Deputy

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Director CAAI (Airworthiness), or by the Manager of the CAAI Engineering Branch.

The following shall be reviewed:

- 9.1.3.1 All details of Form K.A. 1618 are complete.
- 9.1.3.2 Candidate's Curriculum Vitae demonstrates compliance with the qualification requirements detailed in para. 4 above.
- 9.1.3.3 Company's cover letter substantiates in detail the need for the designation and the candidate's experience while employed by the company in the area of expertise applied for designation.
- 9.1.4. The applicant shall be invited for a personal interview following which a decision will be made regarding his appointment.

9.2. Designation

- 9.2.1. If the applicant is found to be acceptable for an immediate appointment as a DER, a designation will be issued to the applicant by the CAAI Deputy Director - Airworthiness Division or Engineering Department Manager. The designation is represented by the following:
 - 9.2.1.1 **CAAI Form 8000-5 (Certificate of Designation)** - Serves as a recognition document for the DER.
 - 9.2.1.2 **CAAI Form 8110-25 (Certificate of Authority)** - Serves as the DER's document of authorization to act as a CAAI representative.
- 9.2.2. A copy of each designee appointment is sent to the company management or relevant administrative DER.
- 9.2.3. If the application for designation is denied, both the applicant and supporting organization must be notified in writing.

9.3. Limitations

- 9.3.1. A qualified person may be appointed to act in more than one type of delegated function.

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9.3.2. The appointee must be personally qualified to determine compliance with the Israeli Air Navigation Regulations in *authorized areas of expertise* and *delegated functions*.

"Authorized area of expertise" applies to the specific portion or system of the aircraft or the type of engine or propeller or specialized area to which a delegated function is applicable.

"Delegated function" applies to the technical areas involved in determining compliance with applicable airworthiness regulations.

9.3.3. The delegated functions and authorized areas of expertise of each DER will be established prior to the time of the applicant's original appointment, and again during periodic review at the DER certificate's renewal date.

9.3.4. The scope of the designation, and any limitation considered necessary at the time of appointment, will be clearly indicated on CAAI Form 8110-25 and on any letter(s) of renewal or authority expansion/reduction, or other related documentation. These should include at least the delegated areas of expertise.

9.3.5. Any other limitations appropriate to the appointment, such as certain ANR regulation(s), will also be listed on the form.

9.3.6. A DER may be appointed for, or limited to, specific types of work. For example a systems and equipment DER could be limited to handling approval of alterations to specific types of systems such as: hydraulic, pressurization, etc., on only one airplane model; or a Flight Test Pilot DER could be limited to conducting flight

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tests only on fixed wing aircraft of a specified maximum gross weight.

- 9.3.7. The level of data approval granted to a DER may vary from project to project depending on the complexity of the project;
- 9.3.8. Caution should be exercised in making delegations so narrowly limited that they become burdensome to the CAAI.
- 9.3.9. CAAI Retains authority and responsibility for examining and approving certain types of technical data, e.g., the certification basis, any special conditions, exemptions, equivalent safety findings, test plans, type inspection authorizations, TCs, STCs, AFMs, service bulletins resulting in ADs, alternate means of compliance to ADs, PMA, TSO, etc.
- 9.3.10. This retention limits the data that can be DER approved.
- 9.3.11. Designated Engineering Representatives (DERs) MAY NOT, unless otherwise authorized by the administrator, perform any of the following:
 - 9.3.11.1 Participate, as a CAAI Representative, in a Material Review Board (MRB). A designee may nevertheless act as a company representative in such board meetings.
 - 9.3.11.2 Issue PMA or TSO certification approvals. However, a DER may contribute towards PMA approvals within the scope of the authorization approved by Deputy Director CAAI. The DER must be specifically authorized for this activity.
 - 9.3.11.3 Approve any data pertaining to Airworthiness Directives (AD).
 - 9.3.11.4 A DER may only execute CAAI form 8110-3 (Statement of Compliance). No other form can be used by the DER in performing his duties.

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- 9.3.12. The CAAI may issue a special authorization letter to permit a DER to approve data normally reserved to the CAAI.
- 9.3.13. The special authorization letter must be specific in its delegation and limited in its duration. Verbal authorization from the CAAI is permitted in some cases (e.g., witnessing tests) provided it is documented on a subsequent CAAI 8110-3 Form.
- 9.3.14. For the purposes of this special authorization, A DER may be appointed to approve technical data not specifically listed in his delegated functions, but in his area of expertise.

10. DER Orientation

- 10.1. When a new DER is appointed, he shall receive a guidance material kit which contains regulatory and technical information pertaining to his specific type of designation.
- 10.2. The CAAI appointing manager (Deputy Director or Engineering Department Manager) is responsible for the initial orientation of a newly appointed DER, in conjunction with the CAAI personnel with whom the DER will be working.
- 10.3. For a DER appointed in more than one area of expertise, appropriate orientation will be given for each area.
- 10.4. Initial orientation should include the following items:
 - 10.4.1. *Certification Organization Structure*
Review of the CAAI organizational structure.
 - 10.4.2. *Personnel*
Introduce the DER to relevant CAAI Engineering personnel.
 - 10.4.3. *Approval Authority*

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Review in detail what items the DER can approve and what may only be recommended for approval.

10.4.4. *DER Guidance Handbook*

Review in detail, as applicable, FAA Order 8110.37B (Designated Engineering Representatives (DER) Guidance Handbook) and CAAI Engineering Procedures.

10.4.5. *CAAI Form 8110-3 (Statement of compliance)*

Explain how to complete CAAI Form 8110-3 and give the DER a supply of the forms.

10.4.6. *Use of Authority*

Advise the DER to exercise the full extent of his delegated authority. If the DER chooses not to exercise his delegated authority, the DER must explain why on CAAI Form 8110-3 (when submitted).

10.4.7. *Test Plan Approval*

Emphasize that a DER cannot approve test plans but can recommend approval of these. Explain that the CAAI may delegate test plan approval to a DER on a case-by-case basis.

10.4.8. *Test Witnessing*

Explain that DERs must have specific approval from the CAAI prior to witnessing a test as a CAAI representative.

10.4.9. *Appointment and Renewal Procedures*

Explain appointment and renewal procedures.

10.4.10. *Other Pertinent Information*

Review other pertinent information, such as regulatory and technical guidance material (e.g. STC application guide, applicable ACs, material burn requirements, classification of major and minor changes).

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Provide the DER with copies of material of particular interest to his appointed delegation.

10.4.11. *Questions concerning Approval Authority*

Emphasize that if the DER has any doubts about the approval authority or questions on any subject, the DER should contact the appropriate manager or CAAI representative.

10.4.12. *Company Influence*

Advise all company DERs to immediately contact CAAI Airworthiness Director if any pressure is put on the DER by their company's management to approve data that the DER believes should not be approved.

10.4.13. *Training*

Advise the DER that the CAAI expects the DER to participate in periodic seminars or training furnished by the CAAI, as an aid in maintaining currency in CAAI and other policy and procedures. The DER will be notified of seminars, when appropriate.

A new DER must attend a DER Standardization Seminar prior to initial appointment.

Explain that a DER is expected to use and implement CAAI policy and guidance material (ACs, notices, orders, etc.) in addition to the regulations.

11. **DER OVERSIGHT AND AUTHORIZATION APPROVAL.**

DER Oversight is the process of documenting and tracking each key interaction, or a combination of key interactions, between the DER and the CAAI, in a practical, consistent, credible, maintainable and flexible manner.

11.1. Guidance and Supervision

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- 11.1.1. All requirements, instructions, regulations and procedures applicable to CAAI engineers, are also applicable to designees in their performance of similar duties.
- 11.1.2. DER submittals (Statements of Compliance) should be reviewed by CAAI for completeness and accuracy. These should include:
 - 11.1.2.1 CAAI specialized engineering supervision and review of designee submittals, as deemed necessary.
 - 11.1.2.2 A special detailed review of randomly selected DER compliance submittals, throughout the first year of his appointment.
 - 11.1.2.3 A reduced level of review after one year of satisfactory experience with no major deficiencies.
- 11.1.3. The DER will be informed of any performance concern and given the opportunity to improve, assuming the concern was not so serious as to merit immediate termination.

11.2. DER Authorization Renewal

The purpose of the evaluation process described below is to annually establish that the DERs performance is at a satisfactory level, or to establish corrective action if this is not the case, before renewing DER authorization. The renewal process for all CAAI DERs is typically performed by the end of each calendar year.

- 11.2.1. Approximately 60 days prior to DER appointment renewal, the Engineering Department Manager in coordination with DER supervising CAAI engineers shall send a CAAI form 8110-37B (DER/CAAI Interaction Tracking Form) to each DER, with instructions for completion of the form, and a request that the form be returned complete to the CAAI office within 30 days.
- 11.2.2. DERs are required to complete and submit the CAAI 8110-37B form.

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11.2.3. DERs are required to summarize “Key Interactions” on a yearly basis. As indicated on the CAAI 8110-37B form, the DER is required to provide a brief summary of the previous year’s activities:

The eight key interactions for oversight of DERs are:

- 11.2.3.1 Development of certification plans and compliance checklists.
 - 11.2.3.2 Identification and resolution of significant technical issues.
 - 11.2.3.3 Review and approval of compliance data.
 - 11.2.3.4 Involvement in project management and administration.
 - 11.2.3.5 Review and approval of repair or alteration data, including process specifications, in support of CAAI repair stations, and approval of repairs or alterations.
 - 11.2.3.6 Investigation and resolution of significant service difficulties.
 - 11.2.3.7 Participation in technical exchanges (meetings and telecons on general technical subjects); and
 - 11.2.3.8 Participation in CAAI training/seminars
- 11.2.4. This summary should include CAAI contact in the DERs field of designation.
- 11.2.5. Detailed project information or design that may be considered proprietary should not be Included in the yearly activity report.
- 11.2.6. Submittal of the properly completed CAAI 8110-37B form is required before the DER authorization can be renewed.
- 11.2.7. The 8110-37B form is signed by the CAAI supervising engineer after verification that all required forms have been returned and are adequate.
- 11.2.8. CAAI engineers assigned to DER supervision are required to complete a CAAI 8110-37A "DER Performance Evaluation Form", prior to renewal of each

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DER's appointment. The complete form will be retained in the DER's file for documentation purposes.

The CAAI 8110-37A form will be completed by the relevant CAAI engineer assigned to each designee supervision.

- 11.2.9. CAAI engineers shall assess twelve performance elements focused primarily on the qualities and qualifications required to justify renewal of the DER's appointment. Assessment should be qualitative and quantitative, as relevant.

The twelve elements of DER evaluation are:

- a. DER Activity level.
- b. Direct CAAI contact.
- c. DER/CAAI Interaction.
- d. Application of regulations, policy and guidance.
- e. Adherence to DER procedures.
- f. Integrity, sound judgment, cooperative attitude.
- g. Technical competence in area of appointment.
- h. Attendance at required training.
- i. Ability to clearly communicate.
- j. Quality of submittals.
- k. Timely identification of significant issues.
- l. Timely submittal of data.

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- 11.2.10. Each DER's file should be evaluated for an acceptable level of activity, notes on submittals, consultations, and any correspondence that would suggest the need for a more critical review.
- 11.2.11. The DER's previous year's activity should be compared to his delegated functions and authorized area(s) of expertise to ensure that no activity outside the scope of his authorization has been performed.
- 11.2.12. The evaluating engineer may rely on as many or as few sources necessary to make assessments. Examples of sources include the engineer's personal experience of the DER performance or conduct, input from the DER/CAAI Interaction Tracking Form, and review of selected DER submittals. This flexibility is important so as to allow CAAI Engineering to establish the appropriate level of review.
- 11.2.13. If personal contact with the DER is necessary to resolve a performance issue, this should be performed, and the "Remarks" section of the Evaluation Form should identify the method of resolution agreed upon by the evaluating engineer and the DER, for each issue.
- 11.2.14. If the CAAI evaluating engineer believes that the DER is not performing at a satisfactory level in a number of areas, if the problem continues from year-to-year, or if the deficiency in a given area is especially serious, the evaluating engineer may recommend that the DER appointment not be renewed, or that the delegation in that particular discipline be eliminated.
- 11.2.15. The evaluating engineer must contact the DER at this point and provide the documentation necessary to

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sustain a non-renewal or reduction of DER scope of authorization.

- 11.2.16. The evaluating CAAI engineer will make a recommendation for renewal or non-renewal, and sign and date the form.
- 11.2.17. If non-renewal is based on inactivity, the DER file must have evidence that the DER has been previously cautioned that lack of activity may result in non-renewal of his authorization.
- 11.2.18. The DER should sign the Evaluation Form verifying his concurrence, or the resolution should be documented in a letter to the DER.
- 11.2.19. Documenting the authorization renewal process:
 - 11.2.19.1 The completed forms as described above should be forwarded to the Engineering Department Manager for further action.
 - 11.2.19.2 If there is no change in DER Approval Status, the CAAI Engineering Department Manager shall issue a renewal of authority.
 - 11.2.19.3 The complete DER renewal package with the DER/CAAI Tracking Form, the DER Performance Evaluation Form(s) and the signed copy of renewal will be placed in the DER's file.

12. Validity and Termination of DER Authority

- 12.1. The validity of a DER "Certificate of Authority" is typically until the 31st of December of the year of issuance, unless valid reasons justifying another expiration date are presented by the DER or his employer. Validity may be extended for additional 12 month periods subject to CAAI policy at that time.
- 12.2. Manufacturers wishing to extend the validity of their employees' designee certificates should apply to the CAAI Engineering Department Manager at least 30 days prior to their expiration date.

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12.3. DER designation may be terminated in the following cases:

- 12.3.1. Upon a written request from the designee's employer (manufacturer).
- 12.3.2. Upon a written notification that the employment of a company designee in that company has terminated.
- 12.3.3. When CAAI has concluded that the designee does not properly fulfill his duties or the functions for which he is authorized.
- 12.3.4. When CAAI has concluded that the services of a designee are no longer required.
- 12.3.5. Upon a finding by the Administrator that the DER's specific qualifications have lapsed.
- 12.3.6. Upon a finding by the Administrator that the DER has not demonstrated the care, judgment, or integrity required for proper exercise of his delegated authority.
- 12.3.7. For any other reasons decided by CAAI.

13. Termination Procedures

13.1. The following must be performed when a DER is given a notice of termination or nonrenewal:

- 13.1.1. If the termination or nonrenewal is based on insufficient activity at the company (Production Approval Holder, supplier, or engineering organization), or on DER misconduct condoned by the company, notice will be given only to the company.

Only the DER employing company may request reconsideration; the individual DER may not.

- 13.1.2. If the termination or nonrenewal of a company DER is based on misconduct not condoned by the company, notice will be given to the DER and the company.

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In this case only the DER may request reconsideration.

- 13.1.3. If the designation is terminated or not renewed at the request of the DER's employing company, the procedures concerning reconsideration of the termination do not apply.

The decision to employ a DER is entirely within the discretion of the company or individual involved.

- 13.2. The company and/or an individual DER must be notified of the reason(s) for any decision to terminate or not renew DER authorization.
- 13.3. Notification of termination should be sent to the relevant parties at least 30 days in advance of the intended effective date.

14. ADMINISTRATIVE DERs

- 14.1. Administrative DERs are assigned to key areas of the applicant's activities to coordinate the compliance data submittals for the CAAI and reduce the time required for CAAI review and approvals.
- 14.2. Administrative DERs may neither fulfill DER's technical functions nor approve compliance data.
- 14.3. Additional qualification requirements

To qualify for appointment as an Administrative DER, the applicant:

- 14.3.1. Must be a company DER.
- 14.3.2. Must have significant experience in direct contact with the CAAI in which the applicant has been actively engaged in processing CAAI approvals.

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This experience must enable the CAAI to determine that the applicant is cognizant of the overall certification process, and the administrative problems encountered in obtaining approvals.

14.4. Functions and Responsibilities

Administrative DERs, unless specifically authorized, may not be involved in any data approval. The following are the responsibilities of administrative DER's:

14.4.1. **Focal Point.** Be a focal point of contact and coordination for CAAI certification activities, including:

- 14.4.1.1 Provide up-front coordination of Certification Data required for CAAI approval,
- 14.4.1.2 Ensure that the certification basis proposed by the applicant is appropriate for the current project,
- 14.4.1.3 Propose the appropriate classification of design changes for initial application to the CAAI.

14.4.2. **Data Submittal.** Assure that all data submitted is properly organized, identified, coordinated, and if appropriate, approved by an appropriately authorized DER. These activities include:

- 14.4.2.1 Review and or approval of engineering data packages prior to submission to CAAI, to ensure applicable requirements have been properly addressed,
- 14.4.2.2 Review of test reports to ensure that all test plan points have been accomplished and properly documented,
- 14.4.2.3 "High level" test report review to ensure that the test data support the conclusions included therein.

14.4.3. **Timeliness.** Assure that all data is forwarded to the CAAI as scheduled in the CAAI approved certification plan, in order to allow CAAI review prior to conformity, testing, TIA issuance, etc.

14.4.4. **Verification of CAAI Form 8110-3.** Ensure that the DER approved CAAI Forms 8110-3 are correctly completed:

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- 14.4.4.1 Review and approval of 8110-3 forms to ensure CAAI requirements have been considered and documented, including the listing of applicable regulations and appropriate signatures;
- 14.4.4.2 Review and approval of 8110-3 forms that release compilation documents containing engineering data previously approved (i.e., summary reports, Certification Requirements documents for outfitters, etc.);
- 14.4.4.3 Review 8110-3's for all documents submitted to CAAI (including reports recommended for approval) to ensure proper DER representation of compliance requirements;
- 14.4.4.4 In cases where discrepancies are found, return the data to its originator for correction;
- 14.4.4.5 After the verification is complete - sign the 8110-3 in the data field as "Reviewed by Administrative DER _____".
- 14.4.5. **Status Reports.** Ensure CAAI is provided with timely and accurate status reports on all current projects, including schedules, conformity requirements, upcoming tests (Company or CAAI) technical problems/issues, etc., and inform the CAAI as soon as possible of any project or priority changes which may impact the certification effort.
- 14.4.6. **Certification Plan/Compliance Checklist.**
 - 14.4.6.1 Ensure accomplishment of a Certification Plan/Compliance checklist early in the program, coordinate it with the technical DERs, update it periodically, and submit it to the CAAI for approval;
 - 14.4.6.2 Ensure CAAI procedures for approval of TC and Post-TC design changes are observed;
 - 14.4.6.3 Ensure that certification plans follow the prescribed format, contain all necessary information, and use approved procedures;
 - 14.4.6.4 Oversee/maintain certification checklist to ensure that all relevant requirements have been satisfied, documented, and are traceable.
- 14.4.7. **Service Information.** Support and coordinate CAAI's requests for information on accidents and service

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difficulties with the appropriate disciplines, and provide follow-up information.

14.4.8. **Training and supervision.** Administrative DERs shall coordinate DER initial training/orientation and recurrent training, and shall review, prior to submittal to CAAI, "CAAI/DER interaction forms" (as a condition for yearly designation renewal).

14.5. Data submittal

All data submitted to CAAI should be accompanied by a cover letter, listing inclusions, marked "as reviewed", and signed by the administrative DER.