

TECHNICAL AIRWORTHINESS AUTHORITY ADVISORY (TAA ADVISORY)	
Title	Engine Ground Run-up Authorization
TAA Advisory Number	2006 – 03e – v4
Effective date	1 DEC 2006 (REVISED 30 DECEMBER 2023)
Reference	TAM PART 1, CHAPTER 4, ANNEX C
OPI/Telephone	DTAES 4-6 / 819-939-4082
RDIMS file	2182D-1027-812-6 – VOL 1 #561880 (English) #587597 (French)

1. Purpose

- 1.1. This Technical Airworthiness Authority (TAA) Advisory provides clarification and guidance on the standards governing the Department of National Defence (DND) requirements for Engine Ground Run-up Authorizations subject to periodic recertification, testing or ongoing demonstration of competency by practical demonstration of a task.
- 1.2. This TAA Advisory is not mandatory, nor does it constitute a regulation. It describes a means acceptable to the TAA, but is not the only means to demonstrate compliance with the regulation(s). If you choose to use this TAA Advisory, then all of its important aspects must be followed.

2. Applicability

- 2.1. This advisory is applicable to all civilian organizations seeking accreditation or recognition as an Acceptable Maintenance Organization (AMO) by the TAA and to the operation of DND aircraft during all facets of Engine Ground Run-ups.
- 2.2. This Advisory does not apply to Military AMOs, who must follow the Engine Ground Run-up directives specified at references 3.2.2 and 3.2.3.
- 2.3. Notwithstanding the airworthiness requirements contained in this TAA Advisory, no organization will be authorized to run up DND-registered aircraft without the approval of the contract Technical Authority for the provision of maintenance services.

3. Related Material

- 3.1 Definitions:
 - a. **Recertification:** a retest or practical demonstration of competency to ensure the Authorization holder is still able to perform complex and demanding tasks in an efficient and safe manner. It also serves as a means to re-instate an authorization lost as the result of not meeting the recency requirement.
- 3.2. Regulatory References:
 - 3.2.1. C-05-005-001/AG-001 – *Technical Airworthiness Manual (TAM)*:
 - a. Part 1, Chapter 4, Section 2, Standard 1, para 5.j.(2);
 - b. Part 1, Chapter 4, Section 2, Annex C; and
 - c. Part 3, Chapter 1 Section 2, Standard 8, para 1.b. Advisory Note.
 - 3.2.2. C-05-005-P05/AM-001 – *Maintenance Policy – Aircraft Weapon Systems Maintenance – Verification of Maintenance*, Part 5 – Maintenance Ground Run-up of Aircraft and Engines; and
 - 3.2.3. 1 Canadian Air Division Orders, Vol. 6, 6-303.

4. Discussion

4.1. Acceptable Means of Compliance. The following minimum pre-requisites should be satisfied prior to receiving the initial Engine Ground Run-up authorization from the Person Responsible for the Assignment of Authority (PRAA):

- a. be a holder of a valid Aircraft Certification Authority (ACA), with the specifics defined in the AMO's Airworthiness Process Manual (APM);
- b. have successfully completed a Type Course (when applicable) on the subject aircraft, with six (6) months of experience on the respective aircraft type;
- c. hold a valid Restricted Radiotelephone Operators License;
- d. have successfully completed the initial Engine Ground Run-up course acceptable to the Senior Design Engineer (SDE) for the Type Certificate Holder (TCH) organization applicable to the fleet; and
- e. have successfully been assessed and recommended to the PRAA by an Engine Ground Run-up Assessor.

4.2. The Engine Ground Run-up authorization requires recertification and demonstration of competency on a periodic basis, as defined below. Training will consist of Engine Run-ups and Emergency Procedures. An acceptable Engine Ground Run-up authorization system should take into consideration the following elements:

- a. the PRAAs within the AMOs should authorize individuals to assume the following role(s) (as required):
 - (1) Senior Engine Ground Run-up Supervisor (lead run-up Assessor);
 - (2) Engine Ground Run-up Assessor(s); and
 - (3) Engine Ground Run-up Technician(s).

NOTE

1. *Within an AMO with numerous Engine Ground Run-up authorized individuals, a Senior Assessor is typically designated as the Senior Engine Ground Run-up Supervisor by the PRAA. This latitude and associated eligibility criteria are usually defined within the organization's Airworthiness Process Manual (APM) and/or Work Instructions (WI).*
2. *The Senior Engine Ground Run-up Supervisor and/or Assessor should be chosen by the PRAA based on their demonstrated leadership, instructional skills, and comprehensive knowledge and experience of the aircraft. Again, these criteria are usually defined within the APM and/or WI.*

- b. authorized Assessors are subject to the experience, recency and recertification requirements stated in paragraphs 4.1, 4.2.c and 4.2.d.
- c. recency should be maintained by executing a minimum of one complete engine ground run-up in the preceding three-month period, which should be recorded as per paragraph 4.2.h.;
- d. recertification should be carried out every 12 months by an authorized Assessor. It should include practical testing of emergency procedures by use of a Flight Deck Simulator (FDS), when one is available. For AMOs who do not have access to a FDS, the Senior Engine Run-up Supervisor or the PRAA will develop a non-engine-running practical oral examination to validate the Aircraft Operator's reactions and competence with hands-on emergency procedures. Again, this recertification should be recorded, signed by the PRAA or assessor, and acknowledged by the individual;

NOTES

1. *When engine run-up recency and recertification requirements have not expired, the individual's file could be managed by the Senior Engine Ground Run-up Supervisor or an Engine Ground Run-up Assessor.*
 2. *Excluding the initial ground run-up authorization, when recertified by an engine ground run-up assessor, the same person may sign for the recertification recommendation and the re-authorization.*
- e. in the event that an authorization held by an individual does not meet the recency and/or recertification requirements, as defined in paragraphs 4.2.c., and 4.2.d., respectively, the authorization will be rescinded and declared void. The holder will be informed and should acknowledge that they may no longer exercise the privileges of the engine run-up authorization. This situation may be due to an absence, a temporary move to another area of responsibility, or inability to demonstrate the desired level of competency;
 - f. authorizations may be reinstated by the PRAA only, when recency and/or recertification requirements have been satisfied using the appropriate re-training, re-testing or check procedure. Recommendation for reinstatement must be sent to the PRAA by the Senior Engine Ground Run-up Supervisor or an Assessor;
 - g. organizations will have a procedure in place to track the granting, rescinding, recertifying and recency of authorization holders. The procedure will ensure that authorizations do not expire, or applicable actions are taken as per paragraph 4.2.e; and
 - h. all engine ground run-ups will be logged using a Run-up Log including training and Run-up Tests. Evaluation Checklists and Run-up Log records will be forwarded to the person responsible to manage engine run-up records within the AMO.

NOTE

The responsibility could be assigned to the Senior Engine Ground Run-up Supervisor, an Engine Ground Run-up Assessor, or the PRAA. The person selected should be specified within the procedure, as identified in paragraph 4.2.h.

- 4.3. Processes and records will include:
 - a. a means to maintain a positive control of each individual's authorization status (i.e., engine ground run-up completed within the preceding three months, recertification due date, when completed, and a link to the aircraft work order, individual recommending and authorizing, as well as acknowledgement by the individual.) Authorizations that have been rescinded and those that are active should also be easily accessible to the person responsible of managing the engine run-up records within the AMO;
 - b. a process that voids authorizations that do not meet the recency requirements at time of application;
 - c. the name of the Assessors who administered the test;
 - d. the results of the test documented in a way that meets the requirement stipulated at paragraph 4.2.h.;
 - e. a process for each individual to acknowledge the status of their privilege; and
 - f. an authorized individual responsible for the management of the system, and a retention procedure that archives the records for five (5) years after the authorisation holder leaves the organization.