Title	Ground run turbo-jet or turbo-fan aircraft engines		
Level	5	Credits	10

Purpose	People credited with this unit standard are able to: prepare to ground run turbo-jet or turbo-fan aircraft engines; carry out engine ground run; and complete activities related to the ground run task.

Classification	Aeronautical Engineering > Aircraft Servicing

Available grade	Achieved

Guidance Information

1   All tasks must be carried out in accordance with enterprise procedures.

2   Definitions
Enterprise procedures – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
FOD – foreign object debris which is anything that can find its way into an aircraft engine or flight control mechanisms that could possibly cause damage to aircraft, equipment, or people.

3   Approval to ground run specific aircraft and engine types is obtained from the enterprise responsible for maintaining the engine.

4   This unit standard covers generic procedures for ground running aircraft engines.

5   Turbo-jet or turbo-fan aircraft engines include single and/or multi engine, e.g. Soko Galeb, Citation, Boeing 757, Boeing 777.

6   The scope of the system that this standard relates to is described in the applicable chapters of ATA iSpec 2200.

Outcomes and performance criteria

Outcome 1

Prepare to ground run turbo-jet or turbo-fan aircraft engines.

Performance criteria

1.1   Ground run task is determined by reviewing maintenance documentation and enterprise procedures.

1.2   Resources are obtained and checked for serviceability or status.

        Range   may include but is not limited to – publications, tools, equipment, safety equipment, materials.

1.3   Aircraft registration is matched with documentation.

1.4   Aircraft is prepared for engine start.

        Range   may include but is not limited to – fuel load and location; blanks, locks, chocks, covers, screens; special equipment and safety equipment removed, fitted and positioned as necessary; engine start equipment and aircraft positioned in approved area, area checked for FOD before starting.

1.5   Environmental data is obtained.

        Range   may include but is not limited to – barometric pressure, outside air temperature, wind speed and direction, humidity.

1.6   Ground run team is assembled and positioned.

Outcome 2

Carry out engine ground run.

Performance criteria

2.1   Engine start and ground run clearances are obtained.

        Range   from ground crew and/or from control tower.

2.2   Engine or engines are started, run, and shut down to meet the determined task requirements or specifications.

2.3   Engine performance parameters are recorded.

2.4   Post ground run checks are completed.

Outcome 3

Complete activities related to the ground run task.

Performance criteria

3.1   Aircraft is prepared for next maintenance task or for operation.

3.2   Completion activities specific to the task and work area are carried out.

          Range   may include but are not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity.

3.3   Resources are checked for serviceability and returned to service or storage.

          Range   may include but is not limited to – tools, equipment, safety equipment.

3.4   Ground run documentation is completed.

Replacement information	This unit standard, unit standard 23165, and unit standard 23166, replaced unit standard 3905.

Planned review date	31 December 2024

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 September 2006	31 December 2016
Review	2	18 June 2014	31 December 2021
Review	3	26 March 2020	N/A

Consent and Moderation Requirements (CMR) reference	0028

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.