

Field Engineering and Technology

Review of *Aeronautical Engineering* unit standards

Subfield	Domain	ID
Aeronautical Engineering	Avionic Maintenance	3943-3945, 3948, 4022, 22509-22518, 22520-22545, 22928, 30701, 30702

ServiceIQ has completed the review of the unit standards listed above.

Date new versions published

March 2020

Planned review date

December 2024

Summary

This is the second set of a wider review of all unit standards in the *Aeronautical Engineering* subfield. The review was undertaken in consultation with the Aeronautical Engineering industry which included Air New Zealand, Royal New Zealand Air Force, Air New Zealand Engine Workplace, and Nelson Marlborough Institute of Technology, to ensure the standards' relevance, as the technology associated with aircraft has become more sophisticated. The consultation for the review took place in May 2019.

The initial meeting was held at ServiceIQ in Wellington with industry around a table. The standards were taken back to the workplace and suggestions were made to ServiceIQ regarding changes to be incorporated. The unit standards were checked, and content confirmed that these standards reflect the needs of the aeronautical engineering industry and are in line with international regulatory requirements.

Main changes

- Unit standards were transferred to the current template and terminology was updated accordingly.
- Outcomes, performance criteria, range statements, and guidance information were updated to reflect the needs of the aeronautical engineering industry, and in line with international regulatory requirements.
- Stems of some of range statements were amended.
- Titles for some standards were amended to better reflect the content.

The last date for assessment of superseded versions of Category B unit standards is December 2021

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Engineering and Technology > Aeronautical Engineering > Avionic Maintenance

ID	Title	Level	Credit	Review Category
3943	Maintain aircraft galley equipment	4	6	B
3944	Maintain aircraft gaseous oxygen systems	4	12	B
3945	Maintain aircraft autopilot systems	4	25	B
3948	Maintain aircraft global positioning satellite navigation systems	4	8	B
4022	Maintain aircraft compass systems	4	15	B
22509	Maintain aircraft high-frequency (HF) communications systems	4	5	B
22510	Maintain aircraft very high frequency (VHF) communications systems	4	5	B
22511	Maintain aircraft intercommunications systems	4	5	B
22512	Maintain aircraft public address systems	4	5	B
22513	Maintain aircraft emergency locator beacon systems	4	5	B
22514	Maintain aircraft in-flight entertainment systems	4	5	B
22515	Maintain aircraft direct current generating and distribution systems	4	6	B
22516	Maintain aircraft alternating current generating and distribution systems	4	6	B
22517	Maintain aircraft electrical motors and actuators	4	6	B
22518	Maintain aircraft batteries and charging systems	4	4	B
22520	Maintain aircraft lighting systems	4	5	B
22521	Maintain aircraft fire protection and detection systems	4	5	B
22522	Maintain aircraft ignition systems	4	2	B
22523	Maintain aircraft temperature datum systems	4	2	B
22524	Maintain aircraft inertial navigation systems	4	5	B
22525	Maintain aircraft weather radar systems	4	4	B
22526	Maintain aircraft radio and/or radar altimeter systems Maintain aircraft radio or radar altimeter systems	4	4	B
22527	Maintain aircraft ground proximity warning systems	4	5	B
22528	Maintain aircraft traffic alert and collision avoidance systems Maintain aircraft Traffic Alert and Collision Avoidance Systems	4	5	B
22529	Maintain aircraft monitoring instrument systems	4	5	B
22530	Maintain aircraft electrical system indicators and clocks	4	2	B
22531	Maintain aircraft flight data recording and/or cockpit voice recording systems Maintain aircraft flight data recording or cockpit voice recording systems	4	2	B
22532	Maintain aircraft pitot static systems	4	7	B
22533	Maintain aircraft gyroscopic instrument systems	4	2	B
22534	Maintain aircraft position indication systems	4	5	B
22535	Maintain aircraft infrared imaging and/or detection systems Maintain aircraft infrared imaging or detection systems	4	3	B
22536	Maintain aircraft night vision systems	4	4	B
22537	Maintain aircraft head-up display systems	4	2	B
22538	Maintain aircraft fibre optic cabling	4	5	B
22539	Maintain aircraft Tactical Air Navigation systems	4	5	B
22540	Maintain aircraft landing approach aid systems	4	10	B

ID	Title	Level	Credit	Review Category
22541	Maintain aircraft distance measuring equipment systems Maintain aircraft Distance Measuring Equipment systems	4	4	B
22542	Maintain aircraft Automatic Direction Finding systems	4	5	B
22543	Maintain aircraft transponder and/or Identification Friend or Foe systems Maintain aircraft transponder or Identification Friend or Foe systems	4	5	B
22544	Maintain aircraft microwave systems	4	3	B
22545	Maintain aircraft wiring loom and harness assemblies	4	25	B
22928	Maintain aircraft liquid oxygen systems	4	10	B
30701	Maintain aircraft liquid cooled electrical/avionics systems Maintain aircraft liquid cooled electrical or avionics systems	4	5	B
30702	Carry out aircraft software loading	4	5	B