Field Engineering and Technology

Review of Aeronautical Engineering unit standards

Subfield	Domain	ID
Aeronautical	Avionic Instrument Repair	3956, 3964, 3967, 3981, 3983, 3984, 3994,
Engineering		22557-22564, 22931-22933, 22935, 22939,
		22940, 22968
	Avionic Radio Repair	3979, 3996, 3998, 22546-22552, 22569-
		22576, 22929, 22930, 22936, 22938, 30703,
		30704

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

Date new versions published

July 2020

Planned review date

December 2025

Summary

This is the eighth 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 ServicelQ in Wellington with industry around a table. The standards were taken back to the workplace and suggestions were made to ServicelQ 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.
- Unit standards 22551 and 22930 were designated as expiring due to outdated equipment that is no longer used.

Category D unit standards will expire at the end of December 2021

The last date for assessment of superseded versions of Category B unit standards is December 2022

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

All changes are in **bold**.

Ke	y to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the
	same ID and a new version number
В	Changes made, but the overall outcome remains the same - the new version of the standard
	carries the same ID and a new version number
С	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 Instrument Repair

ID	Title		Credit	Review
				Category
3956	Repair commercial aviation optical system components	4	25	В
3964	Repair aircraft navigation computing system components	4	20	В
3967	Repair and/or recondition aircraft autopilot system components Repair or recondition aircraft autopilot system components	4	30	В
3981	Repair aircraft inertial navigation system components	4	30	В
3983	Repair aircraft optical system components	4	30	В
3984	Repair aircraft pitot static system components	4	10	В
3994	Repair aeronautical electronic test equipment Repair aeronautical electronic test equipment components	4	30	В
22557	Repair aircraft digital computer equipment Repair aircraft digital computer equipment components	4	20	В
22558	Repair aircraft digital computer peripheral equipment Repair aircraft computer system peripheral components	4	25	В
22559	Repair electromechanical air data instruments Repair electromechanical air data instrument components	4	30	В
22560	Repair mechanical air data instruments Repair mechanical air data instrument components	4	30	В
22561	Repair aircraft pressure sensing digital air data computers Repair aircraft pressure sensing digital air data computer components	4	25	В
22562	Repair aircraft electronic instrument displays Repair aircraft electronic instrument display components	4	20	В
22563	Repair aircraft electronic multifunction displays Repair aircraft electronic multifunction display components	4	20	В
22564	Repair aircraft electronic character and/or symbol generators Repair aircraft electronic character or symbol generator components	4	25	В
22931	Repair aircraft electronic engine control system components	4	15	В
22932	Repair aircraft compass system components	4	20	В
22933	Repair aircraft flight data recording equipment Repair aircraft flight data recording equipment components	4	10	В

ID	Title	Level	Credit	Review Category
22935	Repair and/or recondition aircraft gyroscopic instrument system components Repair or recondition aircraft gyroscopic instrument system components	4	30	В
22939	Repair aircraft direct reading instrument system components	4	20	В
22940	Repair aircraft remote reading quantitative instruments and components	4	30	В
22968	Repair aircraft remote reading flight instruments and components	4	40	В

Engineering and Technology > Aeronautical Engineering > Avionic Radio Repair

ID	Title	Level	Credit	Review Category
3979	Repair aircraft global positioning system components	4	30	В
3996	Repair aircraft cockpit voice recorders and area	4	30	В
	microphones			
	Repair aircraft cockpit voice recorders and area			
0000	microphone components	1		
3998	Repair aircraft weapons radar system components	4	20	В
22546	Repair aircraft passenger address system components	4	10	В
22547	Repair aircraft passenger entertainment system	4	10	В
00540	components	1	00	
22548	Repair aircraft high-frequency (HF) communication	4	20	В
00540	system components	1	00	<u> </u>
22549	Repair aircraft very high frequency (VHF)	4	20	В
22550	communication system components	4	20	В
22550	Repair aircraft ultra high frequency (UHF) communication system components	4	20	В
22551	Repair aircraft video tape players	4	10	D
22552	Repair aircraft in-flight entertainment video display units	4	15	В
22332	Repair aircraft in-flight entertainment video display	4	13	Ь
	unit components			
22569	Repair aircraft primary airborne radar transceivers	4	30	В
	Repair aircraft primary airborne radar transceiver			
	components			
22570	Repair aircraft primary radar antenna drive units and	4	25	В
	control panels			
	Repair aircraft primary radar antenna drive unit and			
	control panel components			
22571	Repair aircraft distance measuring equipment	4	20	В
	Repair aircraft distance measuring equipment			
	components			
22572	Repair aircraft tactical air navigation system	4	25	В
	components			
22573	Repair aircraft transponder system components	4	25	В
22574	Repair aircraft very high frequency (VHF)	4	30	В
	omnidirectional range system components			
22575	Repair aircraft instrument landing system components	4	25	В
22576	Repair aircraft automatic direction finder system	4	20	В
	components			
22929	Repair aircraft audio system components	4	20	В
22930	Repair aircraft LORAN navigation system components	4	25	D

ID	Title	Level	Credit	Review Category
22936	Repair aircraft ground proximity warning system components	4	20	В
22938	Repair aircraft radio and radar altimeter system components	4	25	В
30703	Repair aircraft emergency locator transmitters (ELT) Repair aircraft emergency locator transmitter (ELT) components	4	10	В
30704	Test aircraft radome transmissivity on a test rig	4	5	В