WORKSHEET

Worksheet A (OPS.03) PSEA type compliance

Applicant name		Applicant ARN		Application date		File reference	

Instructions

1. Use this worksheet for the assessment of a new application for a type to perform prescribed single engine aeroplane (PSEA) operations.
2. Before CASA provides PSEA type eligibility for the purposes of regulation 135.240 of the Civil Aviation Safety Regulations 1998 (CASR) and paragraph 8.03(b) of the Part 135 Manual of Standards (MOS), CASA must confirm that the aircraft type meets the requirements of Appendix 2 to CAO 100.5, for the aircraft engine, propeller and equipment required to conduct a PSEA operation.
3. All sections must be completed.
4. The assessor must be a competent airworthiness engineer.
5. Peer review must be performed by an independent, competent airworthiness engineer, and involves a detailed technical review of all evidence in support of the finding of compliance.
6. The approver is the Section Manger, Aircraft Certification or Branch Manager, Airworthiness and Engineering Branch. The approver may be the same person as the assessor or peer reviewer where independence is maintained.
7. The compliant column is used to record evidence that supports an assessment of *present* and *suitable* for the operation. Select a response from the drop down list. There are four available responses: **Yes** / **No** / **MI** (more information) / **N/A** (not applicable). Yes indicates that both present and suitable have been satisfied and the element is compliant with the rule.
8. For guidance on specific aspects of each question, refer to the respective section in the principle document as identified in the principle reference column.
9. The assessment summary must be completed by the assessor, peer reviewer and approver. Completing the assessment summary is equivalent to signing the worksheet.

PSEA requirements

Aeroplane

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.001	CAO 100.5, Appendix 2, Section 1	N/A	Has the aeroplane in the application been verified as originally type certificated as a turbine-powered aeroplane under an equivalent to FAR 23 Amendment 28 or a subsequent amendment?		

Engine

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.002	CAO 100.5, Appendix 2, Section 2	N/A	Is there documented evidence of an acceptable WFRR for the aeroplane engine type?		
OPS.03.003	CAO 100.5, Appendix 2, Section 2	N/A	Has the WFRR been calculated as a 6-month rolling average, consisting of an in-flight shutdown (IFSD) of not greater than 0.01 per 1,000 hours based on a minimum experience history of 100,000 hours' time-in-service?		

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.004	CAO 100.5, Appendix 2, Section 2	N/A	If the accumulated history is less than the requirement, has the history of individual components that have a demonstrated time in service in similar engine types been taken into account?		

Engine control system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.005	CAO 100.5, Appendix 2, Section 3	2.4.3	Has the applicant demonstrated that the engine control system has met the requirements of FAR 23.1141(e) Amendment 29 (or later amendment) or equivalent?		
OPS.03.006	CAO 100.5, Appendix 2, Section 3	2.4.3	If the use of an emergency/ secondary power lever is available, are the procedures for use documented in the aircraft flight manual (AFM)?		

Engine ignition system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.007	CAO 100.5, Appendix 2, Section 4	2.4.4	Is the aeroplane is equipped with an automatic ignition system which activates in the event of a loss of an engine parameter or an ignition system which can be selected 'ON' and has a duty cycle greater than 1 hour?		

Engine fire warning system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.003.008	CAO 100.5, Appendix 2, Section 5	2.4.5	Is the aeroplane equipped with an engine compartment fire detection and in-flight warning system?		
OPS.03.009	CAO 100.5, Appendix 2, Section 5	2.4.5	Is it compliant with an applicable TSO, for example TSO-C11E?		

Engine monitoring system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.010	CAO 100.5, Appendix 2, Section 6	2.4.6	Is the aeroplane equipped with an approved Part 21 automatically activated electronic engine trend monitoring recording system?		
OPS.03.011	CAO 100.5, Appendix 2, Section 6	2.4.6	Does the system record engine parameters referenced in the engine manufacturers published engine trend monitoring procedures?		
OPS.03.012	CAO 100.5, Appendix 2, Section 6	2.4.6	Does the system record any other engine performance parameters that are critical to the engine's safe continuing airworthiness?		
OPS.03.013	CAO 100.5, Appendix 2, Section 6	2.4.6	Is the engine oil consumption monitored in accordance with the engine manufacturers recommendations?		

Engine oil metal contamination detection system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.014	CAO 100.5, Appendix 2, Section 7	2.4.7	Is the aeroplane equipped with an engine oil particle detection system, which provides the pilot with an in-flight, visual, caution/warning indication of possible contamination of the engine oil, including (as applicable) the reduction gearbox and accessory gearbox oil system?		

Electrical power sources

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.015	CAO 100.5, Appendix 2, Section 8	2.4.8	Is the aeroplane equipped with a primary electrical generator?		
OPS.03.016	CAO 100.5, Appendix 2, Section 8	2.4.8	Is the aeroplane equipped with an alternate source of electrical power, capable of supplying sufficient continuous power to flight instruments?		
OPS.03.017	CAO 100.5, Appendix 2, Section 8	2.4.8	Is the aeroplane equipped with an alternate source of electrical power, capable of supplying sufficient continuous power to navigation systems?		

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.018	CAO 100.5, Appendix 2, Section 8	2.4.8	Is the aeroplane equipped with an alternate source of electrical power, capable of supplying sufficient continuous power to lighting systems?		
OPS.03.019	CAO 100.5, Appendix 2, Section 8	2.4.8	Is the aeroplane equipped with an alternate source of electrical power, capable of supplying sufficient continuous power to icing protection systems?		

Electrical load analysis and battery capacity

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.020	CAO 100.5, Appendix 2, Section 9	2.4.9	Has an electrical load analysis (ELA) for the aeroplane been provided by the applicant?		
OPS.03.021	CAO 100.5, Appendix 2, Section 9	2.4.9	Does the ELA certify the aeroplane's prime battery is capable of providing full operation of essential systems and equipment during an engine failed glide from max operating altitude to sea level?		
OPS.03.022	CAO 100.5, Appendix 2, Section 9	2.4.9	Does the ELA also certify there is sufficient capacity during an engine failed glide to conduct 2 engine start attempts and lower the flaps and undercarriage?		

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.023	CAO 100.5, Appendix 2, Section 9	2.4.9	If the requirement for sufficient battery capacity is reduced to capacity for 1 engine start, does it meet the parameters set out in paragraph 9.3(a), 9.3(b) and 9.3(c) of Appendix 2 to CAO 100.5?		

Electrical load shedding

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.024	CAO 100.5, Appendix 2, Section 10	2.4.10	Has the AFM, or approved equivalent, provided a procedure for shedding non-essential electrical systems following an engine failure?		
OPS.03.025	CAO 100.5, Appendix 2, Section 10	2.4.10	In the case of an automatic shedding procedure, has the AFM provided information of how the automatic shedding procedure will operate?		

Flight instrument systems

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.026	CAO 100.5, Appendix 2, Section 11	2.4.11	Is the aeroplane equipped with flight and navigation instruments and instrument power sources compliant with air transport IFR operations regulations?		
OPS.03.027	CAO 100.5, Appendix 2, Section 11	2.4.11	For aeroplanes incorporating an electronic display flight instrument system (EFIS), does it also incorporate secondary non-EFIS attitude and gyroscopic heading instruments, located on the pilot's flight instrument panel and powered independently of the EFIS?		
OPS.03.028	CAO 100.5, Appendix 2, Section 11	2.4.11	For aeroplanes approved for flight in icing conditions, has the AFM (or equivalent) provided a procedure for ensuring essential flight instruments are protected from icing through icing conditions following an engine failure in flight?		

Autopilot system

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.029	CAO 100.5, Appendix 2, Section 12	2.4.12	For single pilot operations, is the aeroplane equipped with an approved automatic pilot that complies with Australian regulatory requirements for air transport IFR operations?		

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.030	CAO 100.5, Appendix 2, Section 12	2.4.12	Is the automatic pilot capable of operating the flight controls to: • maintain the flight and manoeuvre the aeroplane about the roll and pitch axis • fly to an automatic heading • provide altitude hold?		

Global Navigation Satellite System (GNSS)

	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.031	MOS 91.26.08	2.4.13	Is the aeroplane equipped with an IFR approved Global Positioning System (GPS)?		

Radar altimeter

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.032	CAO 100.5, Appendix 2, Section 14	2.4.14	Is the aeroplane equipped with a radar altimeter?		

Weather radar

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.033	CAO 100.5, Appendix 2, Section 15	2.4.15	Is the aeroplane equipped with a weather radar system?		

Passenger seats

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.034	CAO 100.5, Appendix 2, Section 16	2.4.16	Is the aeroplane equipped with passenger seats, identified by part number and/or model number, meeting the requirements of Amendment 36 of FAR 23 Parts 23.562 and 23.785?		

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.035	CAO 100.5, Appendix 2, Section 16	2.4.16	Is each passenger seat equipped with a shoulder harness?		

Supplementary oxygen for pressurised aeroplanes

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.036	MOS 135.11.40	2.4.1	Is there sufficient supplemental oxygen available for all occupants, following an engine failure to descend to 14,000 feet AMSL from the maximum operating altitude, or an elected limiting altitude, at the aeroplane's best range gliding speed?		

Landing light

UID	Legislation reference	Principle reference	Question	Compliant?	Inspector comments
OPS.03.037	MOS 135.8.03	2.4.2	Is the aeroplane equipped with a landing light, independent of the landing gear, and is it capable of adequately illuminating the touchdown area in a night forced landing?		

Assessment summary

Applicant name		Applicant ARN		Application date		File reference	

This worksheet verifies the application for the assessment of PSEA type compliance for the above-named applicant has been assessed in accordance with the current revision of Protocol (OPS.03).

Recommendation

Type accepted for PSEA operations?	☐ Yes	☐ No

Assessor

Name		Title		Date	

Comments

Peer reviewer

Name		Title		Date	

Comments

Approver

Name		Title		Date	

Comments
