

Advisory Circular



GUIDE TO COMPILATION OF SCHEDULE OF EXPERIENCE (SOE)

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1. **GENERAL.** Advisory Circulars (ACs) are issued by the Civil Aviation Authority of Singapore (CAAS) and contain information about standards, practices and procedures acceptable to the Authority. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.
2. **PURPOSE.** This Advisory Circular (AC) is issued to provide guidance to the compilation of a Schedule of Experience (SOE).
3. **APPLICABILITY.** This AC applies to persons who are required to demonstrate recent practical maintenance experience in respect of an application for an initial grant of a SAR-66 aircraft maintenance licence, inclusion of a (sub)category, or the removal of technical limitations from a basic licence.
4. **CANCELLATION.** This is the first Advisory Circular issued on this subject.
5. **EFFECTIVE DATE.** This Advisory Circular is effective on 15 August 2006.
6. **REFERENCES.** SAR 66.30(d) and SAR 66.70(e).
7. **INTRODUCTION.** This AC provides guidance on the information required to be included in a SOE which can be used to demonstrate recent practical maintenance experience as in the situations above or where there is a need to demonstrate practical maintenance experience in relation to a SAR-66 basic licence.
 - a) SAR-66.30 requires applicants to demonstrate practical maintenance when applying for a SAR-66 licence or inclusion of a category or subcategory.
 - b) SAR-66.70(e) requires applicants to demonstrate practical maintenance experience as required by the Authority when applying for the removal of limitations from a SAR-66 licence.

8. SCHEDULE OF EXPERIENCE REQUIREMENTS.

Schedules of experience should be grouped under suitable ATA chapters and reflect those tasks that the applicant has performed or actively participated in. It should cover all applicable systems related to the category/subcategory for the licence sought together with a representative cross section of the types of maintenance tasks involved in each system and on operating aircraft.

Table 1 provides guidance on the suggested ATA chapters applicable for each licence category/subcategory.

A typical format for the schedule of experience is given in Table 2. A complete submission of the schedule should include:

- a) A summary of tasks carried out for each ATA system related to Inspection, Component Replacement, Testing and Troubleshooting & Rectification. The number of times a particular type of task is performed should be indicated for each ATA chapter.
- b) A **schedule of experience duration checklist**. A cross "X" should be marked against each day that the work was performed.
- c) **Work Details** Information provided for both (a) and (b) above must be supported by details of work carried out. The work details should contain information necessary to demonstrate the experience necessary to meet the applicable SAR-66 requirements. The depth and amount of practical experience required will vary depending on the category/subcategory of the licence applied for.

Each entry in the work details should be countersigned by a person holding a CAAS aircraft maintenance licence directly responsible for the work being carried out. The supervisor must ensure that the applicant has participated in or actively carried out the work specified.

For the purposes of the SOE, the following terms apply:

Inspection : Inspection, servicing, cleaning or any work done on a component or installation.

Component Change: Removal/replacement of components

Testing: Functional/operational check, adjustment, calibration, compensation, circuit testing or rigging of a component or installation

Troubleshooting & Rectification: Troubleshooting and/or rectification of component or system faults.

TABLE 1 - RELEVANT ATA CHAPTER FOR DIFFERENT LICENCE CATEGORIES

Topic	ATA	Subcategory Applied For				
		A1/ B1.1	A2/ B1.2	A3/ B1.3	A4/ B1.4	B2
Towing	9	X	X	X	X	
Servicing	12	X	X	X	X	
Air Conditioning & Pressurisation, Safety & Warning Devices	21	X	X	X	X	X
Avionics Systems Autoflight, Communication, Radio and Navigation – replacement of LRUs where functional checks do not require use of special equipment	22/23/34	X	X	X	X	
Avionics Systems - Auto Flight: Yaw Damper, Stability Augmentation, Auto trim, Autopilot, FMS/FMGS, Autothrottle, Autoland.	22	-	-	-	-	X
Avionics Systems – Communications: VHF, HF Audio, CVR, SATCOM, GPS, ACARS.	23	-	-	-	-	X
Electrical Power: Battery, AC/DC Power Generation, Emergency Power generation, Power distribution, Voltage regulation, Circuit protection, External / Ground Power Supply.	24	X	X	X	X	X
Equipment & Furnishing: Cabin Equipment and Layout, Galley, Cargo, Emergency Equipment, Entertainment Equipment.	25	X	X	X	X	X
Fire Protection Systems	26	X	X	X	X	X
Flight Control Systems: Primary flying control (aileron, elevator, rudder, spoiler), Trim control, High lift devices, Electrical/ Fly-by-Wire.	27	X	X	X	X	X
Fuel Systems	28	X	X	X	X	X
Hydraulic Power	29	X	X	X	X	X

Topic	ATA	Subcategory Applied For				
		A1/ B1.1	A2/ B1.2	A3/ B1.3	A4/ B1.4	B2
Ice & Rain Protection	30	X	X	X	X	X
Propeller Ice Protection	30	X	X	-	-	-
Instrument Systems: Pitot static, Gyroscopic, compass, AOA, other aircraft instrument systems – replacement of LRUs where functional checks do not require use of special equipment	31	X	X	X	X	-
Instrument Systems: Pressure measuring, Pitot static, Altitude reporting / alerting, ADC, Temperature and quantity indication, Gyroscopic instrument, GPWS, Compass and compass compensation, FDR, EFIS, Instrument warning, stall warning, AOA, Windshear, Vibration measurement and indication.	31	-	-	-	-	X
Landing Gear	32	X	X	X	X	X
Lights	33	X	X	X	X	X
Avionics Systems – Navigation: VOR, ADF, ILS/MLS, Flight Director, DME, Doppler navigation, Area navigation, RNAV, GPS, GNSS, INS/IRS, ATC, TCAS, Weather avoidance radar, Radio altimeter.	34	-	-	-	-	X
Oxygen	35	X	X	X	X	X
Pneumatics / Vacuum	36	X	X	X	X	X
Water / Waste	38	X	X	-	-	X
On Board Maintenance System	45	X	X	-	-	X
Auxiliary Power units (APUs)	49	X	X	-	-	X
Airframe Structure	51	X	X	X	X	-
Fuselage: Doors, Fuselage, Windows	52/53/56	X	X	-	-	-
Nacelles / Pylons	54	X	X	-	-	-

Topic	ATA	Subcategory Applied For				
		A1/ B1.1	A2/ B1.2	A3/ B1.3	A4/ B1.4	B2
Wings, Flight Control Surfaces, Stabilizers	55/57	X	X	-	-	-
Propeller: Construction, Pitch Control, Synchronizing, Maintenance	61	X	X	-	-	-
Blade tracking and vibration analysis, Transmissions, Airframe structure, Main Rotor, Tail rotor / rotor drive, Rotor flight control	62/64/65/67	-	-	X	X	-
Piston Engines: Engine Performance, Powerplant Installation, Engine Monitoring and Ground Operation, Engine Storage and Preservation	71	-	X	-	X	-
Piston Engines: Engine Fuel Systems, Carburetors, Fuel injection systems	73	-	X	-	X	-
Piston Engines: Ignition Systems	74	-	X	-	X	X
Piston Engines: Engine Indication Systems	77	-	X	-	X	X
Piston Engines: Starting	80	-	X	-	X	X
Piston Engines: Supercharging / Turbocharging	81	-	X	-	X	-
Piston Engines: Engine Construction, Lubricants and Fuels, Lubricants Systems, Induction, Exhaust and Cooling	85	-	X	-	X	-
Turbine Engines: Constructional arrangement and operation, FADEC	71	X	-	X	-	X
Turbine Engines: Engine Performance, Inlet, Powerplant Installation, Engine Monitoring and Ground Operation, Engine Storage and Preservation.	71	X	-	X	-	-
Turbine Engines: Compressors, Combustion Section, Turbine Section	72	X	-	X	-	-

Topic	ATA	Subcategory Applied For				
		A1/ B1.1	A2/ B1.2	A3/ B1.3	A4/ B1.4	B2
Turbine Engines: Turbo-prop Engines	72	X	-		-	-
Turbine Engines: Turbo-shaft Engines	72	-	-	X	-	-
Turbine Engines: Fuel Systems	73	X	-	X	-	X
Turbine Engines: Ignition Systems	74	X	-	X	-	X
Turbine Engines: Air System	75	X	-	X	-	X
Engine Control	76	X	-	X	-	X
Turbine Engines: Engine Indicating Systems	77	X	-	X	-	X
Turbine Engines: Exhaust	78	X	-	X	-	X
Turbine Engines: Bearing and Seals, Lubricants, Lubrication Systems	79	X	-	X	-	X
Turbine Engines: Starting Systems	80	X	-	X	-	X
Turbine Engines: Power Augmentation Systems	82	X	-	X	-	X
Zonal & Station Identification Systems	-	X	X	X	X	X
Defect Diagnosis and Rectification	-	X	X	X	X	X
Mandatory Inspection and Modification	-	X	X	X	X	X

TABLE 2 - TYPICAL FORMAT FOR A SCHEDULE OF EXPERIENCE

SUMMARY OF TASKS					
I declare that the information given in this form is true in every respect.				Page xx of xxx	
Name : _____		Signature: _____			
<input type="checkbox"/> General Experience		<input type="checkbox"/> Aircraft Type : _____			
ATA Chapter		Inspection	Component Replacement	Testing	Troubleshooting & Rectification
Towing	9				
Servicing	12				
Air Conditioning & Pressurisation	21	2	1	1	2
Auto Flight	22	2	2	3	1
Communications	23				
Electrical power	24				
Equipment / Furnishing	25				
Fire Protection	26				
Flight Controls	27				
Fuel	28				
Hydraulic Power	29				
Ice & Rain	30				
Propeller Ice Protection	30				
Indication & Recording System	31				
Landing Gear	32				
Lights	33				
Navigation	34				
Oxygen	35				
Pneumatics	36				
Vacuum	37				
Water & Waste	38				
Cabin Systems	44				
On board Maintenance System	45				
Information Systems	46				
APU	49				
Aircraft Structures	51				
Doors	52				
Fuselage	53				
Nacelles / Pylons	54				
Stabilizer	55				
Windows	56				
Wings	57				

TABLE 2 - TYPICAL FORMAT FOR A SCHEDULE OF EXPERIENCE (Continued)

WORK SCHEDULE DURATION CHECKLIST																									
I declare that the information given in this form is true in every respect.																				Page xx of xxx					
Name : _____													Signature : _____												
<input type="checkbox"/> General Experience													<input type="checkbox"/> Aircraft Type : _____												
Year :													Year :												
Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	X												1												
2		X											2												
3													3												
4													4												
5													5												
6													6												
7													7												
8													8												
9													9												
10													10												
11	X												11												
12	X												12												
13													13												
14													14												
15	X												15												
16													16												
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26													26												
27													27												
28													28												
29													29												
30													30												
31													31												
Total Number of days : _____ Mark with a cross (x) against the date on which work was performed or actively participated in																									

TABLE 2 - TYPICAL FORMAT FOR A SCHEDULE OF EXPERIENCE (Continued)

WORK DETAILS									
I declare that the information given in this form is true in every respect.						Page xx of xxx			
Name : _____					Signature : _____				
ATA 21 - Air Conditioning & Pressurisation									
	A/c Regn	A/c Type	Description of work carried out	Date performed	Inspection	Component Replacement	Testing	Troubleshooting & Rectification	Supervisor In- Charge
1	9V-XYZ	B744	C/out inspection of recirculation fan per AMM xx-xx-xx	11 Jan 04	✓				Sign/ date
2	N4321	MD11	ACM replaced per AMM xxxx. Operational check carried out per AMM xx-xx-xx	12 Jan 04		✓		✓	Sign/ date
3	N1234	B767	Ref: T/Log xxxx – Assisted in the troubleshooting of intermittent outflow valve operation. O/flow valve replaced as per AMM xx-xx-xx	15 Jan 04	✓		✓	✓	Sign/ date
4						
...									
ATA 22 - Auto Flight									
1	VH-ABC	A320	Carried out Land Category III capability check as per MM xx-xx-xx.	1 Jan 04			✓		Sign/ date
2	9M-DEF	B744	Ref T/Log xxxxx – Carried out troubleshooting of Auto Flight Control System to ascertain cause of failure to engage all the three autopilots. Found autopilot disengage switch on Captain's control column faulty. Disengage switch replaced as per MM xx-xx-xx. Carried out ground test of AFCS as per MM xx-xx-xx.	11 Jan 04	✓	✓	✓	✓	Sign/ date
3	9V-GHI	A345	Carried out replacement of Flight Management Guidance and Envelop Computer Number 1 (FMGEC 1) in accordance with Component Change Sheet CCS/xxx. Performed functional check of FMGS as per MM xx-xx-xx	2 Feb 04	✓	✓	✓		Sign/ date
4						
...									