



Aircraft Maintenance Engineers Licenses Type Ratings:-

1. Introduction:-

- 1.0. This Airworthiness Notice No.(1) sets out the Type Ratings that may be endorsed for Aircraft Maintenance Engineers Licenses in respect of the Certification of Aircraft Registered in Sudan including also their Engines and systems.
- 1.1. The Requirements for the grant, extension and renewal of Aircraft Maintenance Engineer Licenses are prescribed in ANR Part IX Volume 4.
- 1.2. The extent to which the privileges of a Type Rated Licence may be exercised is shown in the current issue of Airworthiness Notice No. 2.

Note:-

- a) The civil Aviation Authority – Sudan, recognizes the standards prescribed by the International Civil Aviation Organization (ICAO) for the grant and extension of Licenses.
- b) Reserved.

2. Applicability:-

- 2.1. Where a Type of Aircraft (or its Engines or systems) is defined by one of the Group Type Ratings in paragraphs (5) to 9, 12 or 15 of this Notice, an Engineer may exercise the Certification privileges in respect of that type, subject in particular to the provisions of Airworthiness Notice No. (2) and provide that:-
 - a) He holds a valid Sudan Type Rated Licence in the appropriate category, endorsed with Sub- division of the Notice and
 - b) An Aircraft of the Type is registered in Sudan and holds a Sudanese Certificate of Airworthiness.
- 2.2. Where a Type of Aircraft (or its engine, or system) is listed individually within paragraphs 5, 6, 7 and 10 of this Notice, the license holder has a certification privileges in respect of the individual types as listed on the license, subject to the provisions of Airworthiness Notice No. 2.



3. Categories A, B & C Aeroplanes, Engines and Rotorcraft:-

3.1. Specific Type Ratings

- 3.1.1. Type Ratings in Categories "A" and "C" may be granted only for specific aircraft and/or engines defined by or listed in paragraph 5, 6, 7 of this Notice.
- 3.1.2. A Type Rating in Category "B" Aeroplane, will not be granted in respect of an unpressurised aeroplane exceeding 5700 Kg. MTWA, an aeroplane in which the primary structure is of reinforced plastic/epoxy manufacture. Or any pressurized aeroplane.
- 3.1.3. A Type Rating in Category "B" Rotorcraft will not be granted in respect of a turbine – engine rotorcraft exceeding 2730 Kg. MTWA.

4. Group Type Ratings:-

- 4.1. A Group Type Rating granted in relation to Sub-paragraphs of paragraph 5, 6, or 7 of this Notice includes all the airplanes, engines, or rotorcraft defined by that Sub-paragraph except as limited by Sub-paragraphs 5.1, 5.2.1, 6.3 and 7.1.
- 4.2. Group Type Ratings for Category "B" – Aeroplanes or rotorcraft, may be granted for sub-paragraphs 5.1.5.7.5.7.1, 7.1 and 7.3, excluding any rotorcraft exceeding 2730 Kg. MTWA.

5. Category "A" and "B" Aeroplane:-

- 5.0 Composite Materials Aeroplanes Not Exceeding 5700Kg. M.T.W.A. (not available in Category "B").
- 5.1. **Wooden and Wood and Metal Aeroplanes:-**
Aeroplanes where the primary structure is manufactured from wood or combination of wood and metal.
- 5.2. Unpressurized metal aeroplanes not exceeding 2730 kg. MTWA.
 - 5.2.1 Unpressurized metal areoplanes not exceeding 2730 kg. MTWA with fixed landing gear only.
- 5.3. Unpressurized metal aeroplanes not exceeding 5700 kg. MTWA.



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- 5.3.1 Unpressurized metal aeroplanes not exceeding 5700 kg. MTWA with fixed landing gear only.
- 5.4. Unpressurized metal aeroplanes.
- 5.5. Pressurized metal aeroplanes not exceeding 5700 kg. MTWA, and all unpressurised metal aeroplanes, but excluding aeroplanes defined in paragraph 14 of this Notice.
- 5.5.1. Pressurized and unpressurized metal aeroplanes not exceeding 2730 kg. MTWA.
- 5.6. Individual types of pressurized aeroplanes exceeding 5700 kg. MTWA, but excluding those aeroplanes defined in paragraph 14 of this Notice.
- 5.6.1. Due to the significant changes in the type since it was first introduced, the type rating for the Boeing 737 will be grouped to cover the following variants:-
- B.737-100 and 200 series.
B.737-300- 400 and 500 series
B.737-600, -700 AND 800 series.

Existing holder of the category "A" B.737 Type Rating will qualify for the B.737 up to and including the 500 series.

6. Category "C" Engine:-

- 6.0. Reserved.
- 6.1. Unsupercharged reciprocating piston engines, fitted with a fixed/ pitch propeller.
- 6.2. Unsupercharged reciprocating piston engines, fitted with a fixed and variable pitch propellers.
- 6.3. Category "C" Piston engines in aeroplanes.
- 6.4. JET- Turbine Engines in Aeroplanes not exceeding 22.25 KN(5000 lbf) static thrust including where so endorsed the associated APU Installations.
- 6.5. Individual Types of propeller Turbine Engines in Aeroplanes (including, where so endorsed, the associated APU Installations).
- Walter M601.
Prat & Whitney Canada PT6.



- 6.6. JET- Turbine Engines in Aeroplanes exceeding 22.25 KN static thrust including where so endorsed the associated APU installations.

7. Categories "A" and "C" – Rotorcraft:-

- 7.1. Reseved.
- 7.2. Reserved.
- 7.3. Turbine- Engines Rotorcraft- not exceeding 2730 Kg. MTWA.
- 7.4. Individual Types of Turbine- Engines Rotorcraft exceeding 2730 Kg. MTWA.

8. Category "X" – Instruments:-

- a) A Rating granted in relation to any of the Sub-paragraphs 8.1 to 8.4 includes all of the instruments fitted to those Aircraft- in which are installed system defined by or listed in that Sub-paragraph excluding those Aircraft listed in paragraph 10, and as limited by paragraph 2 of this Notice.
- b) A Rating granted in relation to Sub-paragraph 8.5 related to Instruments- direct and remote reading compasses only, but excludes compasses on those Aircraft listed in paragraph 10 and is limited by Sub-paragraph 2.2 of this Notice.

Note (1) :- A Type Rating Licence which is rated for Category "X" – Instruments now including the INS, GPWS, EGPWS, TCAS II and Compass Systems, (excluding compass compensation and adjustment) whether or not those systems are separately endorsed on the licence.

Note (2):- A Type Rating Licence which is valid for paragraphs 8.2, 8.3 or 8.4 also includes paragraph 8.1.

Note (3):- Where a system is a combined flight director / autopilot the rating does not include items of equipment associated solely with the automatic pilot.

- 8.1. General Aircraft Instrument System but exceeding Instruments Installed a Flight Director System.
- 8.2. Smith Flight System.
Sperry Zero Reader ZL1, ZL2 Flight Director System.
- 8.3. Flight Director Systems employing air driven gyroscopes (attitude).



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- 8.4. Flight Director Systems employing electrically driven gyroscopes (attitude) but excluding those systems defined in Sub-paragraph 8.2.
 - 8.5. "X" Instruments (compasses) – compensation and adjustment of airborne compass systems.

9. Category "X" – Electrical:-

A rating granted in relation to any Sub-paragraph of paragraph 9 of this Notice includes the generation system and electrical Installation in Aircraft as defined by that Sub-paragraph, as limited by paragraph 2 of this Notice.

- 9.1 Aircraft in which the main generation system output is DC (including alternators having a self- contained rectifier system) and in which secondary alternators having an individual power rating not exceeding 1.5 KVA may be fitted.
- 9.2 Aircraft in which the main generation system output is DC and which have installed "frequency wild" alternators with an individual power rating exceeding 1.5 KVA for auxiliary services.
- 9.3 Aircraft in which the main generation system output is "frequency wild" a/c and DC power is supplied from transformer rectifier units.
- 9.4 Aircraft in which the main generation system output is "constant frequency" a/c from alternators driven by constant speed drive units, or variable speed constant frequency (VSCF) generator/ converter systems, and DC power is supplied from transformer rectifier units.

10. Combined Category "X" – Instruments Automatic Pilots:-

- 10.1. Type rating may be granted for specific aircraft fitted with Instruments and automatic pilot systems that have an automatic landing capability or potential. A Type Rating granted in relation to this paragraph 10 includes all the general Instrumentation, Flight director and automatic pilot system, INS, GPWS and Compass systems (excluding compass compensation and adjustment) installed in the aircraft as limited by paragraph (2) of this Notice.
- 10.2. Boeing 737.- 100/200/300/400/500.
- 10.3. Boeing 707.- 100/200/300.
- 10.4. DC.8/50/60/70.
- 10.5. FOKKER 50.



10.6. A300-600

10.7. A310-300

11. Reserved.

12. Category "R" – Radio:-

A rating granted in relation to any sub-paragraph of paragraph 12 of this Notice includes all types of radio systems listed in that sub-paragraph, as limited by paragraph 2 of this Notice.

Note:- A Type Rated Licence in Category "R"- Radio includes Ground Proximity Warning Systems only when the licence is endorsed to that effect.

12.1. Airborne Communication Systems.

12.2. Airborne Communication Systems, Airborne Navigation Systems.

12.2.1. Airborne Communication Systems and Airborne Navigation Systems installed in aircraft below 5700 kg. MTOM, Excluding HF Communications System. Passenger entertainment systems, Multiplex Systems, CVR and Satellite communication systems.

12.3. Airborne Radar Systems.

12.3.1 Airborne Radar System installed in aircraft below 5700 kg. MTOM, Excluding weather radar and TCAS.

13. Category " X" – Automatic pilots:-

A rating granted in relation to any Sub- paragraph of paragraph 13 of this Notice includes all the automatic pilot systems defined by that Sub-paragraph when installed in Aircraft excluding those Aircraft listed in paragraph 10, and as limited by paragraph 2 of this Notice.

Notes:-

- a) For the purpose of licensing, automatic stabilizers are deemed to be automatic pilots.
- b) Automatic pilots include related systems such as yaw dampers and/or roll dampers, mach trim system and automatic and automatic throttle systems.

13.1. Non-Radio- coupled Automatic pilots (Aeroplanes).



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- 13.2. Radio- coupled Automatic pilots (Aeroplanes) excluding ILS coupled (LOC and GS) Automatic pilot, and include paragraph 13.1.
- 13.3. ILS coupled (LOC and GS) Automatic pilots Areoplanes including paragraph 13.1 and 13.2.
- 13.4. Non- Radio – coupled Automatic pilots Rotorcraft.
- 13.5. Radio – coupled Automatic pilots Rotorcraft including paragraph 13.4.
- 14. Reserved.**
- 15. CANCELLATION:- This issue cancels all previous issues of Notice No. 1 which should be destroyed.**


For/ Director General
Civil Aviation Authority