NATO STANDARD

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PRESSURE REFUELLING CONNECTIONS AND DEFUELLING FOR AIRCRAFT

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NATO LETTER OF PROMULGATION

5 June 2014

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Director NATO Standardization Agency

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS

Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.

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RECORD OF SPECIFIC RESERVATIONS

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1.1.1. NATO Documents

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2. STANAG 3681 ILCEP – CRITERIA FOR PRESSURE FUELLING/DEFUELLING OF AIRCRAFT

3. STANAG 3682 ILCEP – ELECTROSTATIC SAFETY CONNECTION PROCEDURES FOR AVIATION FUEL HANDLING AND LIQUID FUEL LOADING/UNLOADING OPERATIONS DURING GROUND TRANSFER AND AIRCRAFT FUELLING/DEFUELLING

1.1.2. Non-NATO Documents

1. ISO 45 – AIRCRAFT PRESSURE REFUELLING CONNECTIONS

1.2. AIM

The aim of this standard is to standardize the aircraft pressure refuelling connections, to facilitate cross-servicing, to ensure the provision of a selective aircraft defuelling capability, and to establish standard practices which will facilitate the completion of defuelling operations.

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CHAPTER 2 REQUIREMENTS

2.1. AIRCRAFT PRESSURE REFUELLING CONNECTIONS.

1. Pressure refuelling connections, fitted to aircraft, shall conform to the dimensions specified in ISO 45 and be capable of accepting not less than 682 Litres (150 Imperial Gallons or 180 US Gallons) of fuel per minute.

2. Aircraft shall incorporate an alternative refuelling capability at least in each main tank for back-up in case the pressure refuelling adaptor is damaged.

3. For those aircraft that require performance of multiple servicing functions, whilst the aircraft is being refuelled, the pressure refuelling adaptor shall be located such that the operations can occur simultaneously. As a design objective, ground support elevating devices shall not be required to facilitate the connection of a refuelling nozzle.

4. Refuelling controls and quantity gauges, if required, shall be located adjacent to the pressure refueling adaptor to facilitate the operation of the refuelling nozzle and the refuelling controls.

5. For those aircraft having the requirement to refuel with engine(s) operating, the location of the pressure refuelling adaptor and controls shall be such as to preclude any hazard to refuelling/maintenance personnel.

2.2. DEFUELLING OF AIRCRAFT:

1. Provision will be made for selective defuelling, through the aircraft refuelling connection or where it is not possible by suction through accessible apertures.

2. Where practicable, in the case of a wheels-up landing, defuelling can be accomplished through the connection normally used for refuelling or by suction through accessible apertures.

3. The maximum rate of defuelling can be achieved with the normal safety precautions required for refuelling.

4. It will be possible to defuel each aircraft tank with any single failure in the aircraft fuel system.

5. System design will preclude negative pressures in flexible tanks that are sufficient to cause collapse of the fuel tanks.

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