NATO STANDARD

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AIRCRAFT TOWING ATTACHMENTS AND DEVICES

Edition A Version 1

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NORTH ATLANTIC TREATY ORGANIZATION

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NATO LETTER OF PROMULGATION

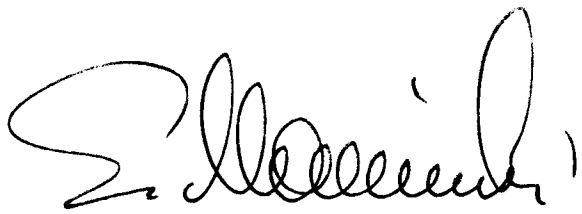
5 November 2014

1. The enclosed Allied Technical Publication AASSEP-05, Edition A, Version 1, AIRCRAFT TOWING ATTACHMENTS AND DEVICES, which has been approved by the nations in the Military Committee Air Standardization Board, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 3278.

2. AASSEP-05, Edition A, Version 1, is effective upon receipt.

3.

4. This publication shall be handled in accordance with C-M(2002)60.



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Director, NATO Standardization Office

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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

[nation]	[detail of reservation]
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CHAPTER 1 INTRODUCTION

1.1. RELATED DOCUMENTS

Nil.

1.2. AIM

The aim of this standard is to define the form and essential dimensions of the hollow axle and spool attachment points on aircraft, as well as the dimensions of the attachment heads on towing and steering bars used for normal towing. This standard also addresses those alternative methods of towing that use a tow bar or tow line.

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CHAPTER 2 REQUIREMENTS

2.1. NORMAL TOWING

2.1.1. Method

The method of towing shall be by means of a towing bar attached to either aircraft hollow axles having the form and dimensions given at Annex A or aircraft spools having the form and dimensions given at Annex B.

2.1.2. Attachment Points

1. Hollow axle and spool attachment points should be accessible using a straight tow bar.

2. The attachment heads on towing and steering bars shall be dimensionally compatible with the applicable aircraft hollow axle or spool attachment points described in Annex A or Annex B, respectively.

3. Towing attachment points shall allow aircraft to be towed forwards or rearward.

2.1.3. Applicability

This standard shall apply only to aircraft with wheels.

2.2. ALTERNATIVE TOWING METHODS

2.2.1. Fittings

1. Aircraft, other than those fitted with arrestor and catapult hooks, shall be provided with lugs or rings having the dimensions given in Table 1 so as to permit attachment of a tow bar or tow line.

2. The lugs or rings shall have cross-section free from sharp corners and be suitable for coupling.

3. Hooks on towing bridles shall be dimensionally compatible with the lugs or rings dimensions described in Table 1.

Table 1 – Towing Lug and Ring Dimensions

AIRCRAFT MAXIMUM TAKE-OFF GROSS WEIGHT		MINIMUM AREA OF CLEAR OPENING IN LUG OR RING		MINIMUM WIDTH OF CLEAR OPENING IN LUG OR RING (MINOR AXIS OF OPENING)	
kg	lb	mm^2	in^2	mm	in
0-13608	0-30000	1290	2.00	Circular Hole	
>13608	>30000	2026	3.14	35	1.375

ANNEX A INSIDE DIMENSIONS OF HOLLOW AXLE TOWING ATTACHMENT

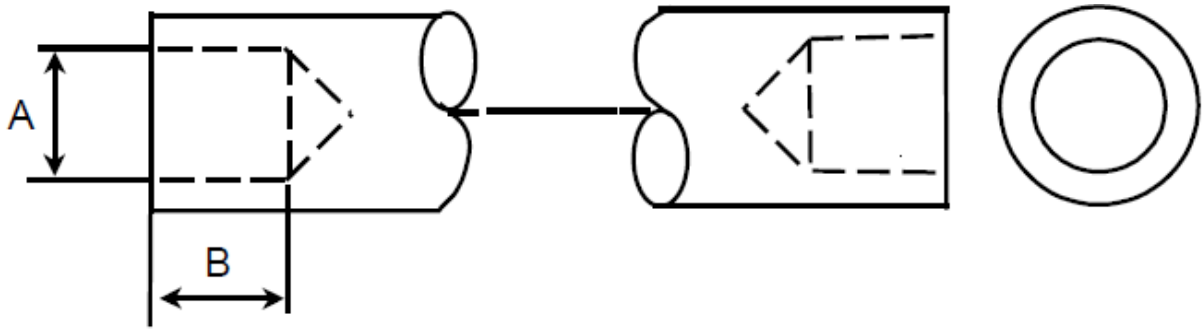

Figure1

Table 2

AIRCRAFT MAXIMUM TAKE OFF GROSS WEIGHT		AXLES INSIDE DIAMETER A		MINIMUM DEPTH OF HOLLOW AXLE B	
kg	lb	mm	in	mm	in
0-88450	0-195000	19,05 (+0,40/-0)	0.75 (+0.0016/-0)	25,40	1.00
88450-224527	195000-495000	31,75 (+0,79/-0)	1.25 (+0.031/-0)	38,10	1.50

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ANNEX B DIMENSIONS OF SPOOL TOWING ATTACHMENT

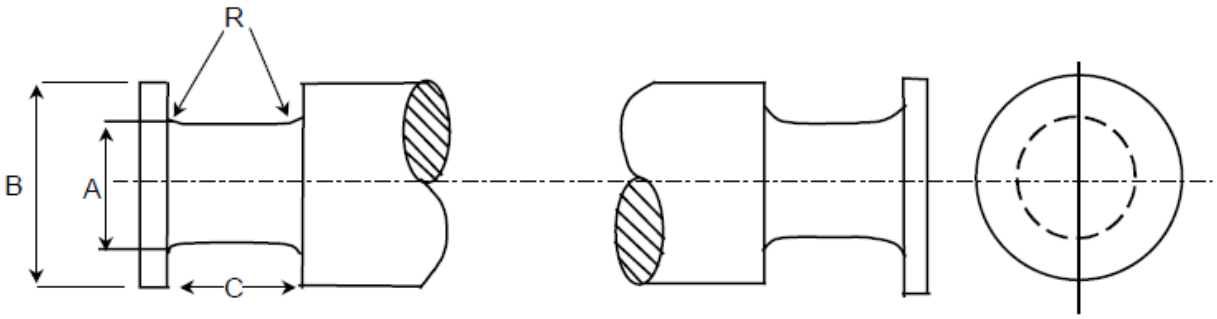

Figure 2

Table 3

AIRCRAFT MAXIMUM TAKE OFF GROSS WEIGHT	SPOOL DIAMETER A	FLANGE DIAMETER B	WIDTH OF SPOOL BETWEEN FLANGES C	RADIUS AT SPOOL-FLANGE INTERSECTION R
kg (lb)	mm (inches)	mm (inches)	mm (inches)	mm (inches)
0-88450 (0-195000)	22,23-25,40 (0.875-1.00)	38,10 (1.50)	25,40 (1.00)	3,175 (0.125)
88450-224527 (195000-495000)	25,40-38,10 (1.00-1.50)	50,8 (2.00)	25,40 (1,00)	3,175 (0.125)
224527-294833 (495000-650000)	50,80-57,15 (2.00-2.25)	69,85-76,20 (2.75-3.00)	184,15 (7.25)	6,35 (0.25)
294833-385551 (650000-850000)	57,15-69,85 (2.25-2.75)	76,20-88,90 (3.00-3.50)	203,20 (8.00)	6,35 (0.25)

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