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NATO UNCLASSIFIED NORTH ATLANTIC TREATY ORGANIZATION ORGANISATION DU TRAITE DE L'ATLANTIQUE NORD

MILITARY AGENCY FOR STANDARDIZATION (MAS) BUREAU MILITAIRE DE STANDARDISATION (BMS) 1110 BRUSSELS

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11 December 1996

MAS(AIR)420-AA/3726

See Distribution List Air B

STANAG 3726 AA (EDITION 5) - BAIL (PORTAL) LUGS FOR THE SUSPENSION OF AIRCRAFT STORES

References:

- a. MAS(AIR) 15-AA/3726 dated 1 February 1996 (Ratification Draft 1)
- b. MAS(AIR)321-AA/3726 dated 31 July 1992 (Edition 4)
- 1. The enclosed NATO Standardization Agreement which has been ratified by nations as reflected in page iii is promulgated herewith.
- 2. The references listed above are to be destroyed in accordance with local document destruction procedures.
- 3. AAP-4 should be amended to reflect the latest status of the STANAG (and AP if applicable).

ACTION BY NATIONAL STAFFS

4. National staffs are requested to examine page iii of the STANAG and, if they have not already done so, advise the Air Board, MAS through their national delegation as appropriate of their intention regarding its ratification and implementation.

G B. FERRARI Major-General, ITAF Chairman, MAS

Enclosure:

STANAG 3726 (Edition 5)

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STANAG No. 3726 (Edition 5)

NORTH ATLANTIC TREATY ORGANIZATION (NATO)



MILITARY AGENCY FOR STANDARDIZATION (MAS)

STANDARDIZATION AGREEMENT

(STANAG)

SUBJECT: BAIL (PORTAL) LUGS FOR THE SUSPENSION OF AIRCRAFT

STORES

Promulgated on 11 December 1996

Major-General, ITAF Chairman, MAS

RECORD OF AMENDMENTS

No.	Reference/date of amendment	Date entered	Signature
2	MAS(AIR) 174-BA 13726 16.05.97 MASCAIR) 443-1719/3726 16.10.97		16.9 16.9

EXPLANATORY NOTES

AGREEMENT

- 1. This NATO Standardization Agreement (STANAG) is promulgated by the Chairman MAS under the authority vested in him by the NATO Military Committee.
- 2. No departure may be made from the agreement without consultation with the tasking authority. Nations may propose changes at any time to the tasking authority where they will be processed in the same manner as the original agreement.
- 3. Ratifying nations have agreed that national orders, manuals and instructions implementing this STANAG will include a reference to the STANAG number for purposes of identification.

DEFINITIONS

- 4. <u>Ratification</u> is "In NATO Standardization, the fulfilment by which a member nation formally accepts, with or without reservation, the content of a Standardization Agreement" (AAP-6).
- 5. <u>Implementation</u> is "In NATO Standardization, the fulfilment by a member nation of its obligations as specified in a Standardization Agreement" (AAP-6).
- 6. <u>Reservation</u> is "In NATO Standardization, the stated qualification by a member nation that describes that part of a Standardization Agreement that it will not implement or will implement only with limitations" (AAP-6).

RATIFICATION, IMPLEMENTATION AND RESERVATIONS

7. Page iii gives the details of ratification and implementation of this agreement. If no details are shown it signifies that the nation has not yet notified the tasking authority of its intentions. Page iv (and subsequent) gives details of reservations and proprietary rights that have been stated.

Agreed English/French Texts

STANAG 3726 (Edition 5)

NAVY/ARMY/AIR

NATO STANDARDIZATION AGREEMENT (STANAG)

BAIL (PORTAL) LUGS FOR THE SUSPENSION OF AIRCRAFT STORES

Annexes: A. Bail (Portal) Lug for 1,000 lb Class Store B. Bail (Portal) Lug for 2,000 lb Class Store

Related Document: STANAG 3441 AA - DESIGN OF AIRCRAFT STORES

AIM

1. The aim of this agreement is to establish the dimensions and strength of bail (portal) lugs for the suspension of aircraft stores from suspension racks which have conventional hooks.

AGREEMENT

2. Participating nations agree that the dimensions and strength of bail (portal) lugs for the suspension of aircraft stores from suspension racks which have conventional hooks are as detailed herein.

DETAILS OF THE AGREEMENT

3. The dimensions of the bail (portal) lug for 1,000 lb class stores shall be as detailed in Annex A, and those of the bail (portal) lug for 2,000 lb class stores shall be as detailed in Annex B. The lugs must be compatible with the threaded lug wells as specified in STANAG 3441.

NOTE:

Dimension H of Tables 1 and 2 in the annexes specifies Class 3A precision machined and cold rolled threads for the lugs to permit more even load distribution when only 3 lug threads are engaged for aircraft fit checks. Current loading procedures allow backing-out of the lugs to a minimum of 3 threads to permit multiple carriage fit checks for aircraft-store certification. Class 2 threads would, potentially, allow imposition of excessive structural transfer loads on the first thread, when only 3 threads are engaged.

4. The bail (portal) lugs of the store shall be capable of withstanding the most severe operational conditions to which the aircraft is subject, including aerodynamic and inertia loads together with loads due to shock and vibration. Any

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part of the lug shall be strong enough to withstand a load, gradually applied, along the axis of the lug as follows:

Class Store	Ultimate Load
1,000 lb	40,000 lbf
(500 kg)	(177928 N)
2,000 lb	80,000 lbf
(1,000 kg)	(355856 N)

IMPLEMENTATION OF THE AGREEMENT

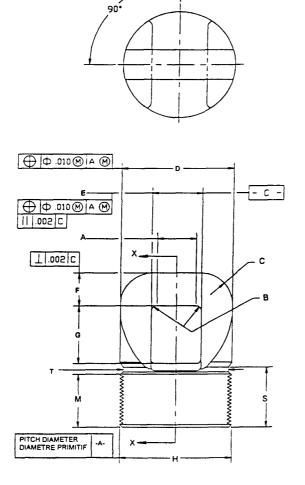
5. This STANAG is implemented when a nation has issued instructions that all future equipment procured for its forces will be in accordance with the specifications detailed in this agreement.

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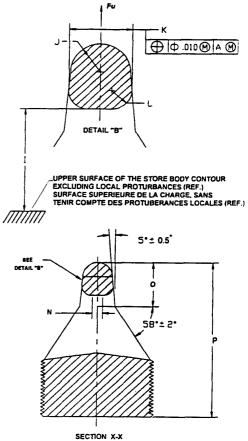
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ANNEX A TO ANNEXE A AU
STANAG 3726
(Edition 5)

BAIL (PORTAL) LUG FOR 1,000 LB CLASS STORE ANNEAU A OEIL NORMALISE POUR CHARGES EMPORTEES DE LA CLASSE 500 KG



THE ULTIMATE LOAD (Fu) SHALL BE 40,000 LBF IN THE VERTICAL AXIS. LA CHARCE EXTREME ADMISSIBLE DANS LE PLAN VERTICAL, SERA DE 177928N.



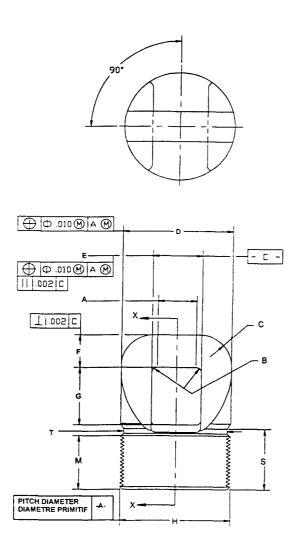
A-1

DIMENSIONS 1000 POLIND CLASS LUC				
1000 POUND CLASS LUG				
Inches		Millimeters		
A	0.480 Minimum Flat	12.19 Minimum Flat		
В	0.120 R Minimum	3.05 R Minimum		
C	$0.620 \pm 0.030 \text{ R}$	$15.74 \pm 0.76 \mathrm{R}$		
D	1.750 +0.000 / -0.010	44.45 +0.00 / -0.25		
E	0.720 +0.030 / -0.000	18.29 +0.76 / -0.00		
F	0.550 +0.000 / -0.030	13.97 +0.00 / -0.76		
G	1.000 +0.030 / -0.000	25.40 +0.76 / -0.00		
Н	1.750 - 12UN-3A	44.45 - 12UN-3A		
Ι	1.000 Minimum	25.40 Minimum		
	1.102 Maximum	27.99 Maximum		
J	$0.203 \pm 0.015 R$	$5.16 \pm 0.38 \text{ R}$		
K	0.422 +0.000 / -0.030	10.72 +0.00 / -0.76		
L	$0.094 \pm 0.030 \text{ R}$	$2.39 \pm 0.76 \text{ R}$		
M	0.687 ± 0.030	17.45 ± 0.76		
N	0.140 Minimum Flat	3.56 Minimum Flat		
О	1.012 +0.030 / -0.000	25.70 +0.76 /-0.00		
P	2.375 +0.060 / -0.000	60.33 +1.52 / -0.00		
S	0.875 +0.030 / -0.00	22.23 +0.76 /- 0.00		
Т	1.596 +0.020/-0.000	40.54 +0.51 / -0.00		

TABLE 1. BAIL SUSPENSION LUG, 1000 POUND CLASS, AIRBORNE EQUIPMENT

ANNEX B TO/ANNEXE B AU STANAG 3726 (Edition 5)

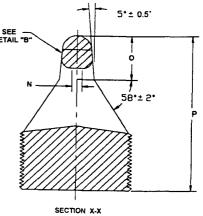
BAIL (PORTAL) LUG FOR 2,000 LB CLASS STORE ANNEAU A OEIL NORMALISE POUR CHARGES EMPORTEES DE LA CLASSE 1000 KG



THE ULTIMATE LOAD (Fu) SHALL BE 80,000 LBF IN THE VERTICAL AXIS.
LA CHARGE EXTREME ADMISSIBLE DANS LE PLAN VERTICAL, SERA DE 355856N.

DETAIL "B"





DIMENSIONS				
2000 POUND CLASS LUG				
Inches		Millimeters		
Α	0.875 Minimum Flat	22.22 Minimum Flat		
В	0.120 R Minimum	3.05 R Minimum		
C	$0.730 \pm 0.040 \text{ R}$	18.54 ± 1.02 R		
D	2.500 +0.000/-0.030	63.50 +0.00 / -0.76		
E	1.125 +0.030/-0.000	28.57 +0.76 / -0.00		
F	0.770 +0.000/-0.030	19.56 +0.00 / -0.76		
G	1.350 +0.030/-0.000	34.29 +0.76 / -0.00		
H	2.500 - 12UN-3A	63.50 - 12UN-3A		
Ι	1.350 Minimum	34.29 Minimum		
	1.442 Maximum	36.63 Maximum		
J	0.330 +0.000/-0.010 R	8.38 +0.00 / -0.25 R		
K	0.700 +0.000/-0.030	17.78 +0.00 / -0.76		
L	0.220 +0.000/-0.020 R	5.59 +0.00 / -0.51R		
M	1.250 ± 0.030	31.75 ± 0.76		
N	0.230 Minimum Flat	5.84 Minimum Flat		
0	1.030 +0.030/-0.000	26.16 +0.76 / -0.00		
P	3.625 +0.000/-0.030	92.08 +0.00 / -0.76		
S	1.410 +0.000/-0.030	35.81 +0.00 / -0.76		
T	2.345 +0.020/-0.000	59.56 +0.51 / -0.00		

TABLE 2. BAIL SUSPENSION LUG, 2000 POUND CLASS, AIRBORNE EQUIPMENT