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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> MAS(AIR)60-AA/3635 22 February 1996

To :

See Distribution List Air B

Subject

STANAG 3635 AA (EDITION 4) - AIRCRAFT STORES

SUSPENSION UNITS WITH GRAVITY RELEASE CAPABILITY

References:

a. MAS(AIR)66-AA/3635 dated 27 March 1995

(Edition 4)(1st Draft)

b. MAS(AIR)458-AA/3635 dated 19 November 1992

(Edition 3)

Enclosure :

STANAG 3635 (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.

ACTION BY NATIONAL STAFFS

4. National staffs are requested to examine page iii of the STANAG and if they have not already done so, to 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

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STANAG No. 3635 (Edition 4)

NORTH ATLANTIC TREATY ORGANIZATION (NATO)



MILITARY AGENCY FOR STANDARDIZATION (MAS)

STANDARDIZATION AGREEMENT

(STANAG)

SUBJECT: AIRCRAFT STORES SUSPENSION UNITS WITH GRAVITY RELEASE

CAPABILITY

Promulgated on 22 February 1996

Major-General, ITAF Chairman, MAS

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RECORD OF AMENDMENTS

No.	Reference/date of amendment	Date entered	Signature
.1	MFIS(17, R) 418-171713635 17.12.96 MITS(171R) 46-171713635	14.12.00	Zeid
	13.07.99 MAS(BIR)1097-127/7635	14.12.00	Ser 01
	13.09.99		

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 3635 (Edition 4)

NAVY/ARMY/AIR

NATO STANDARDIZATION AGREEMENT (STANAG)

AIRCRAFT STORES SUSPENSION UNITS WITH GRAVITY RELEASE CAPABILITY

Annexes:

A. Sway Brace and Ejector Areas for Stores with 14 inch

Suspension

B. Sway Brace and Ejector Areas for Stores with 30 inch

Suspension

Related Documents: STANAG 3441 AA - DESIGN OF AIRCRAFT STORES

STANAG 3556 AA - AIRCRAFT STORE EJECTOR

CARTRIDGE

STANAG 3605 AA - COMPATIBILITY OF ARMING

SYSTEMS AND EXPENDABLE

AIRCRAFT STORES

STANAG 3726 AA - BAIL (PORTAL) LUGS FOR THE

SUSPENSION OF AIRCRAFT STORES

STANAG 4187 AA - FUZING SYSTEMS - SAFETY DESIGN

REQUIREMENTS

AIM

1. The aim of this agreement is to establish the interface and design criteria for aircraft stores suspension units with gravity release capability.

AGREEMENT

2. Participating nations agree that the interface and design criteria for aircraft stores suspension units with gravity release capability are as detailed herein.

GENERAL

3. This agreement covers aircraft stores suspension units with gravity release capability which will accept, suspend and release stores of the 500 kg (1000 lb) and 1000 kg (2000 lb) classes.

DETAILS OF THE AGREEMENT

- 4. The suspension unit shall be capable of retaining the combined reaction load of the store at the maximum "g" loading of the aircraft on which the store is carried.
- 5. The suspension hooks shall be compatible with the suspension lugs as detailed in STANAG 3726.

- 6. Whether or not sway braces are used or required does not depend on the type of suspension lug used. If sway braces are used they must conform to the following requirements:
 - a. Be capable of interfacing with stores having the following crosssectional profile characteristics:

SUSPENSION	STORE RADIUS
14 inch	100-250 mm (4-10 inch)
14/30 inch	100-380 mm (4-15 inch)

b. Be located symmetrically about the suspension hooks and lie within the sway brace location areas defined in Annexes A and B.

NOTE:

The sway braces should make at least line contact. Crutching methods should, if possible, be such as to prevent or minimize the risk of overcrutching, leading to excessive hook preload which may prevent hook operation and store release.

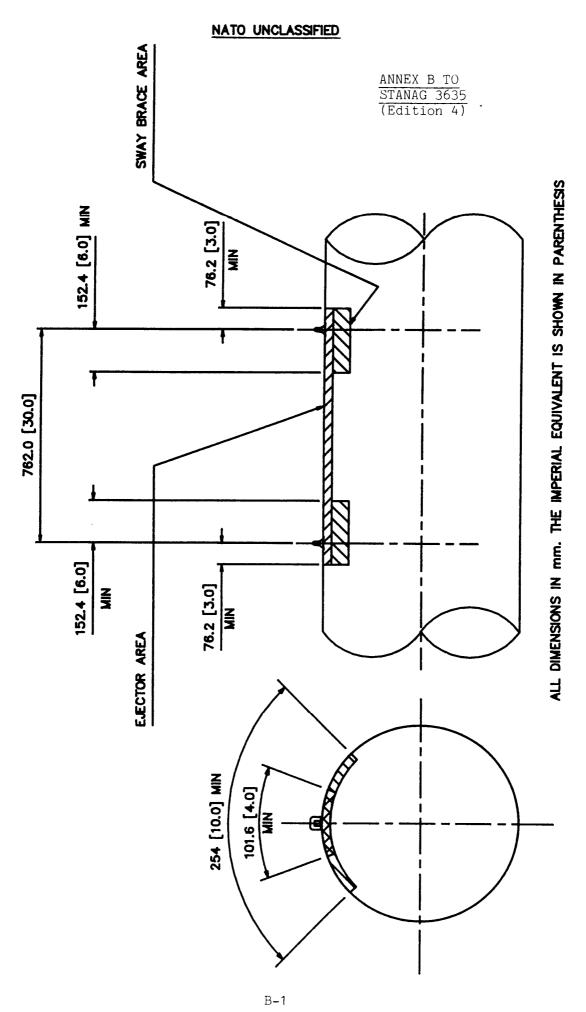
- 7. Stores arming or fuzing provisions may be in integral part of the suspension unit and shall be in accordance with STANAGs 3605 and 4187.
- 8. A ground inserted safety pin or other ground settable device shall be provided to prevent inadvertent store release. The design of the safety pin or device, when inserted or activated, shall provide complete and positive retention of the store on the suspension unit regardless of the method of attempted release or accidental functioning of suspension unit. The safety pin or device is to be capable of being inserted or activated immediately after loading the store on the rack, and capable of being removed or de-activated just prior to flight or alternatively removed or de-activated in flight.
- 9. If cartridges are used adequate safeguards against electromagnetic radiation hazards should be incorporated. Cartridges shall be in accordance with STANAG 3556.
- 10. The elapsed time between the release signal reaching the unit and the hook moving to the fully open position shall not exceed 50 ms.

IMPLEMENTATION OF THE AGREEMENT

11. 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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SWAY BRACE AND EJECTOR AREAS FOR STORES WITH 14 INCH SUSPENSION



SWAY BRACE AND EJECTOR AREAS FOR STORES WITH 30 INCH SUSPENSION