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NOTICE OF CHANGE

INCH-POUND

MIL-STD-1366D
NOTICE 1
31 March 2003

DEPARTMENT OF DEFENSE
INTERFACE STANDARD

TRANSPORTABILITY CRITERIA

TO ALL HOLDERS OF MIL-STD-1366D:
1. THE FOLLOWING PAGES OF MIL-STD-1366D HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
15	31 Mar 03	15	18 Dec 98
16	31 Mar 03	16	18 Dec 98

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-1366D will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the standard is completely revised or canceled.

Custodians:
Army – MT
Navy – SA
Air Force – 11

Preparing Activity:
Army – MT
(Project No. PACK-1139)

Reviewing Activities:
Army – CR3, GL3, PT, SM, TM2
Navy – AS, CG, NP, TD
Air Force – 13
DLA – CC, DH, GS
OSD – SE, SP

AMSC NO A6709

AREA PACK

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Gross vehicle weight is dependent on the vehicle type, as defined in the *Limits of Motor Vehicle Sizes and Weights*. Vehicles and vehicle cargo combinations shall have a military load classification number less than 50, and meet the requirements of this paragraph and when unrestricted worldwide highway transport is a requirement.

For unrestricted highway transport in Korea the following apply:

Width	3.00 meters	(9.84 ft, 118.1 in)
Height	4.00 meters	(13.12 ft, 157.5 in)
Length	17.00 meters	(55.77 ft, 669.3 in)
	19.00 meters	(62.34 ft, 748.0 in)
	(twin combinations on four-lane expressway)	
Single axle load	10 000 kg	(22,046 pounds)
Tandem axle load	16 000 kg	(35,274 pounds)
Gross weight	40 000 kg	(88,185 pounds)

5.1.4 Military Load Classification (MLC) FM 5-170, STANAG 2021, and TM 5-312 provide guidance on route reconnaissance and classification. To make maximum use of existing routes, the military load-carrying capacity of the routes in a basic military road network must be determined. This process is called classification. The MLC system assigns whole numbers to vehicles, bridges, roads, and routes. Usually, the lowest bridge MLC number determines the MLC of a route. The materiel developer should request that MTMCTEA obtain an MLC from the Tank- Automotive and Armaments Command (TACOM) for vehicles and vehicle cargo combinations during the engineering and manufacturing development phase of acquisition. Vehicles and vehicle cargo combinations shall be designed to the MLC requirement.

5.1.5 Determining crew weights. The materiel developer must account for the weight of the crew when determining the gross vehicle weight (GVW) and axle loads of highway transporters. Also, the crew weight is considered a part of the payload for vehicles with payloads less than 4,400 pounds (1134 kg). This weight includes the soldier's body weight plus the weight of the soldier's basic load of clothing, ammunition, individual equipment and weapon, and food. MTMCTEA identifies planning guidelines for crewmember weights as follows:

Total Crew Weight	
Single-Soldier Crew	334 pounds (151.5 kg)
Two-Soldier Crew	640 pounds (290.3 kg)
Three-Soldier Crew	936 pounds (424.6 kg)
Four-Soldier Crew	1,220 pounds (553.4 kg)

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These weight figures include 20.72 pounds (9.40 kg) of clothing, 64.47 pounds (29.24 kg) of equipment, and 32.53 pounds (14.76 kg) of existence load per person. Weight variances for multiple size crews account for reduced probability of several 95th percentile crewmembers being assigned to the same system. Allowances shall be made to accommodate increases in the crew weight due to operations in cold weather scenarios. For cold weather scenarios, the clothing weight will increase to 35 pounds (15.88 kg) and the equipment weight will increase to 80 pounds (36.29 kg) per person. This means a single-soldier crew weight will be 364 pounds (165.1 kg). The information in this paragraph is derived from a study based on the Land Warrior and the 82nd Airborne Division. The materiel developer/contractor shall meet the requirements of this paragraph when determining crew weights for highway transport.

5.1.6 Cargo tiedowns

Items transported on cargo vehicles need to be secured to prevent movement and damage during highway shipment. The items need to be secured to:

.7 times the weight of item in the forward longitudinal direction:
.3 times the weight of the item in the aft longitudinal and lateral directions; and
.5 times the weight of the item in the vertical upward direction.

The forward longitudinal requirement was derived from the vehicle-braking requirement in the Title 49 CFR. The other requirements were established based on standard Civil Engineering practices for safe highway design.

If the vehicle itself, with its payload, is going to be transported, the payload (secondary load) must be secured to the requirements for planned transport modes. The payload becomes the secondary load, with the transported vehicle being the primary load. The secondary load restraints required for highway transport are not as restrictive as those required for other modes.

5.1.7 Modeling and simulation for highway

For highway transport, 3D modeling supports establishing procedures for loading and securing equipment to transport vehicles. This helps resolve issues of compatibility and allows publishing tiedown procedures that exceed normal field practices.

5.2 Rail Transportation

5.2.1 General

Items developed for movement by the rail mode should meet the limitation imposed by physical, legal, and administrative characteristics of rail lines worldwide. This document presents the most significant constraints of North American and foreign rail systems. These criteria establish guidelines to ensure that new military equipment requiring rail transport is compatible with the capabilities and limitations of North American and foreign rail systems.