

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
1. TITLE  Deck Strength Limitation Data Report		2. IDENTIFICATION NUMBER  DI-GDRQ-81029		
3. DESCRIPTION/PURPOSE 3.1 This report provides aircraft data so that flight and hangar decks and aircraft elevator platforms of ships can be assessed for adequate strength for aircraft operations.				
4. APPROVAL DATE (YYMMDD)  900918	5. OFFICE OF PRIMARY RESPONSIBILITY (ORR)  N/AIR-5512E	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. 7.2. This DID supersedes DI-S-21542A.				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER N4985
10. PREPARATION INSTRUCTIONS <u>10.1 Content</u>  The deck strength limitation data report shall contain the following information as applicable:  a. <u>Landing gear geometry</u>  (1) Describe configuration of landing gear (nosewheel type, tailwheel type, tricycle type with outriggers, etc.).  (2) Configuration of each strut (single/dual wheels). If dual, give center-to-center distance of tires.  (3) Wheel base (distance from center of main tire deck contact area to center of nose/tail tire deck contact area). Also distance from center of main gear contact area to center of outrigger or other auxiliary gear deck contact area.  (4) Main gear and outrigger (auxiliary) gear tread (distance center-to-center of tire deck contact areas).  <p style="text-align: right;">(continued on Page 2)</p>				
11. DISTRIBUTION STATEMENT DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				

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## Block 10, Preparation Instructions (Continued)

b.	<u>Tires</u>	<u>Main</u>	<u>Nose/Tail</u>	<u>Auxiliary</u>
(1)	Size	_____	_____	_____
(2)	Ply rating	_____	_____	_____
(3)	Rated load	_____	_____	_____
(4)	Rated pressure	_____	_____	_____
(5)	Shipboard operation pressure	_____	_____	_____
(6)	Rim dimensions	_____	_____	_____

c. Weight

- (1) Maximum shipboard take off design gross weight \_\_\_\_\_.
- (2) Alternate shipboard take off design gross weight (if applicable) \_\_\_\_\_.
- (3) Maximum shipboard landing design gross weight \_\_\_\_\_.
- (4) Alternate shipboard landing design gross weight (if applicable) \_\_\_\_\_.
- (5) Parking design gross weight \_\_\_\_\_.

d. Center of Gravity: The longitudinal and vertical location of the centers of gravity in relation to the main wheels (center of tire/deck contact area) for gross weights of 10.1.c.(1) through 10.1.c.(5) above.

e. Landing Gear Reactions

- (1) Maximum load (normal to deck) for each gear for catapulting (if applicable).
- (2) Maximum load (normal to deck) for each gear for landing normal attitude.
- (3) Maximum load (normal to deck) for each gear as applicable, for rolled attitude up to 5 degrees.

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## Block 10, Preparation Instructions (Continued)

f. Tire Footprint Areas

(1) For static load condition at maximum gross weight (nose/tail and main).

(2) For maximum load on each gear (nose and main) for catapulting (if applicable).

(3) For maximum design load or vertical landing reaction per main wheel.

(4) For maximum design load or vertical landing reaction per nose wheel(s).

g. The Transverse Sail Area

(1) Spread condition \_\_\_\_\_

(2) Folded/Swept condition \_\_\_\_\_

(3) Any intermediate condition (define) \_\_\_\_\_

h. Center of Pressure: The longitudinal and vertical location of the center of pressure relative to main gear (center of tire/deck contact area) for:

(1) Spread

(2) Folded/swept condition

(3) Any intermediate condition (define)

10.2 Format.

Contractor's format is acceptable for the above data or can be satisfied by a dimensioned schematic as illustrated in Figures 1 or 2.

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Block 10, Preparation Instructions (Continued)

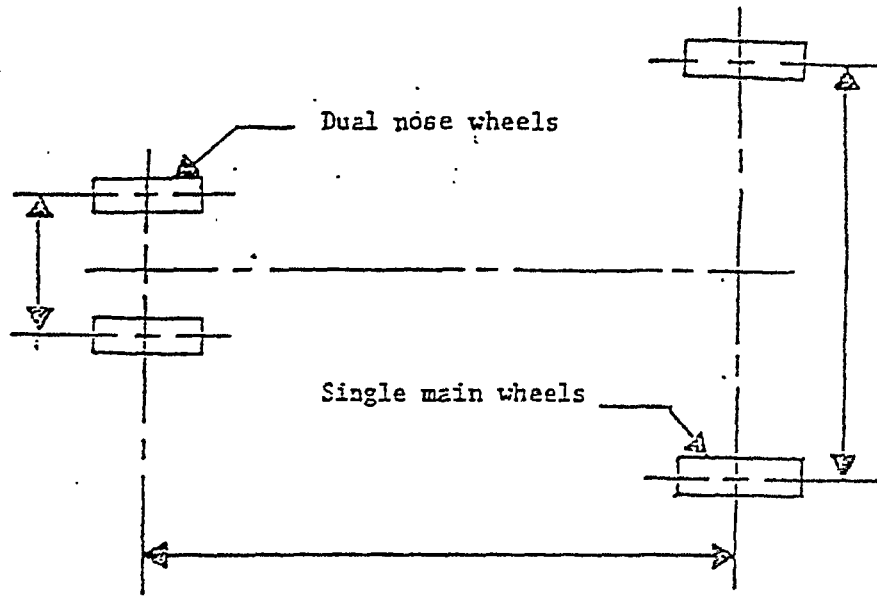


Figure 1. Landing Gear Configuration

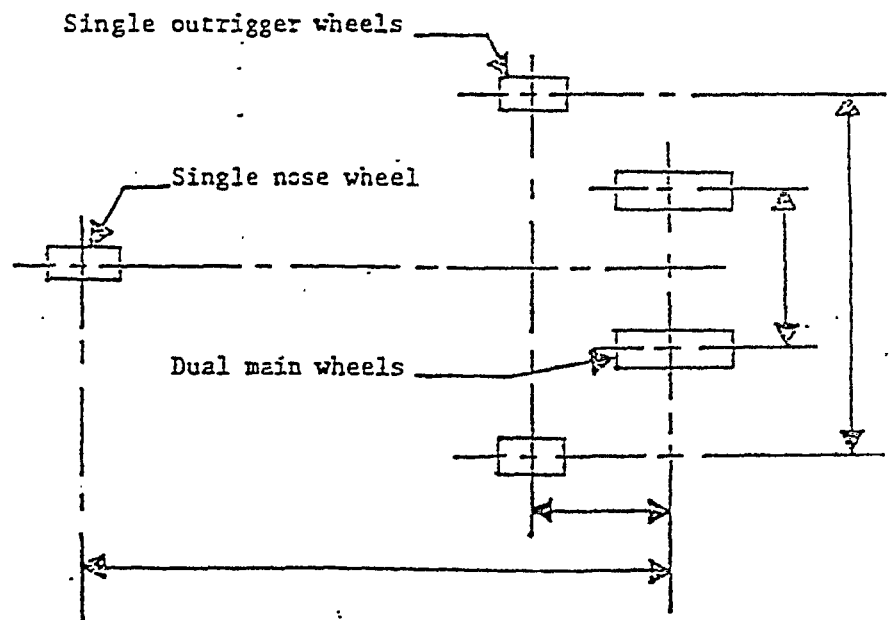


Figure 2. Landing Gear Configuration