

| 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)

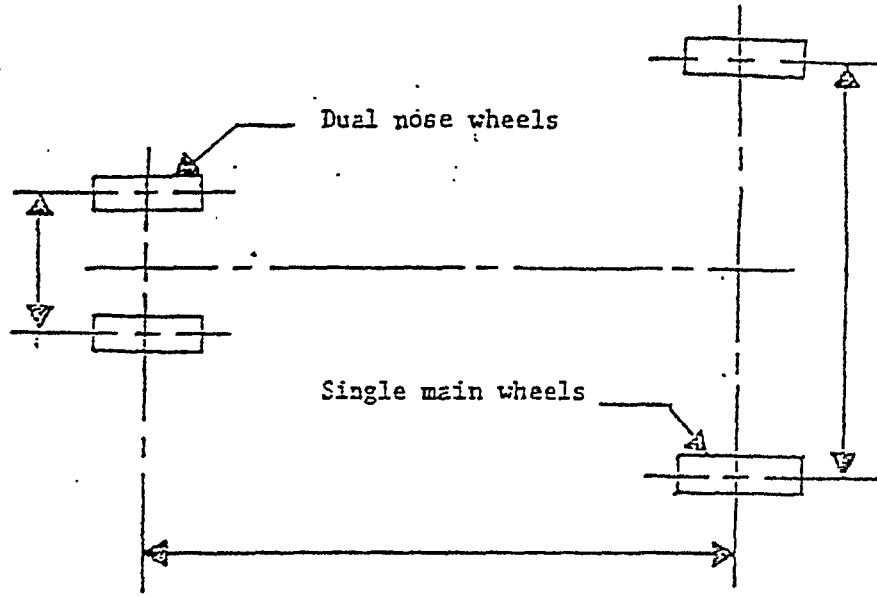


Figure 1. Landing Gear Configuration

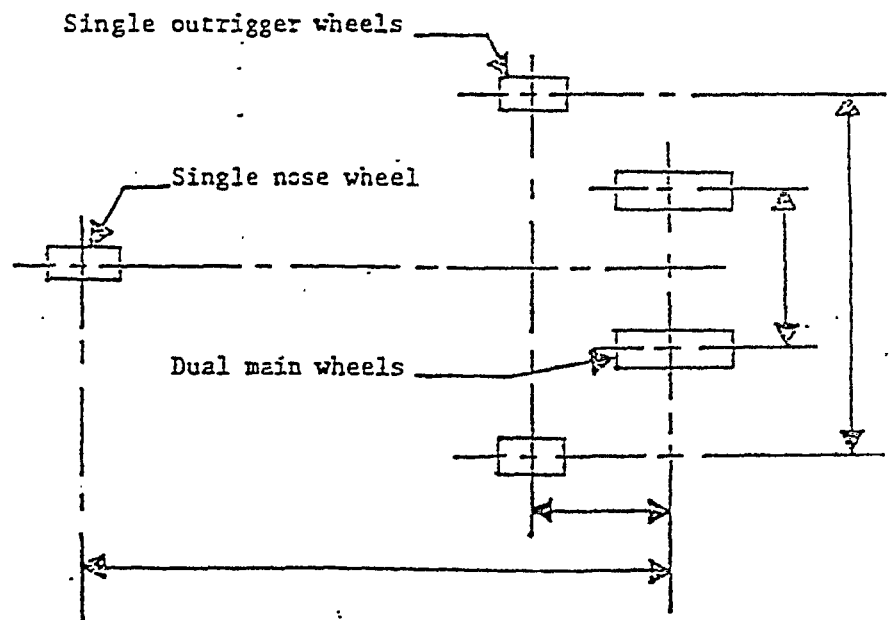


Figure 2. Landing Gear Configuration