The Tire Shall Be In Accordance With The Applicable Requirements of Specification MIL-T-5041 Except As Specified Herein

FED. SUP CLASS 2620

Size	Ply Rating	Static Load Rating Lbs.	Vert. Load Lbs. Min.	Infl. Press. PSI Rated	Burst Press. PSI Min.	Bead Width Inch Max.	Weight Lbs. Max	Static Unbal. Oz.-In. Max.	Tread	Mold Skid Depth Min.	Deflection + 2% - 4%
26 x 7.75-13	8TL 1/	5,600	12,050	85	340 2/	1.31	26.0	8	Rib 3/	.25	34

1/ TL - Tubeless Tire

2/ Tested Tire or New

3/ At least four, but not more than seven continuous circumferential ribs.

TIRE DATE

A. Static Test Tire

Inflated Outside Diameter (inch) Min.	Max.	Inflated Section Width (inch) Min	Max.	Inflated Shoulder Diameter (inch) Max.	Inflated Shoulder Width (inch) Max.
25.50	26.30	7.45	7.90	23.90	6.95

B. Dynamic Test Tire 4/

Grown and Thrown Inflated Outside Diameter (inch) Max.	Grown Inflated Section Width (inch) Max.	Grown Inflated Shoulder Diameter (inch) Max.	Grown Inflated Shoulder Width at Max. Shoulder Diameter Max. (inch)
27.60	8.20	24.45	7.25

4/ Grown and thrown dimensions to be confirmed during cycles 15 of Test B and 20 of Test C.

RIM DATA

Width Between Flanges (inch)	Flange Width (inch)	Ledge Diameter (inch)	Ledge Width (inch)	Flange Height (inch)	Heel Radius (inch)	Flange Radius (inch)
6.5	0.47	13	1.50	0.70	0.175	0.35

The tire covered by this drawing shall be suitable for use and provide reasonable service life during all normal operations at take-off and landing speeds indicated herein on all types of runways and on aircraft carriers.

Test Tires Numbers 1 and 2 shall consecutively withstand the following dynamic test spectrum in alphabetical sequence followed by Test J. Minimum burst pressure for Test J shall be 340 PSI.

Test	A	B	C	D	E	F	G	H_1	H_2	J
Cycles	15	15	20	18	30	1	1	25	25	1

Test Tire Number 3 shall be subjected to Test I followed by 15 cycles of Test A and 15 cycles of Test E and then loaded against the 1-3/8 inch diameter plain round bar stock or cable until tire failure occures.

Test A Taxi-Take-Off - The tire shall be taxied on the flywheel at 40 MPH for 7500 feet with 5600 pounds load. Upon completion of the taxi roll, the flywheel shall be stopped. The flywheel shall then immediately be accelerated at an average rate of 14.7 ft/sec/sec from 0 MPH to a speed of 180 MPH. The tire shall be unlanded after a take-off roll distance of 2,385 feet has been covered in approximately 18-19 seconds. The initial load of 5600 pounds shall be decreased linearly with time to 4500 pounds at 10 seconds after the start of the take-off roll and then decreased linearly with time to 2100 pounds at the time the tire is unlanded.

Test B Taxi-Take-Off - The tire shall be taxied on the flywheel at 40 MPH for 7500 feet with 5000 pounds load. Upon completion of the taxi roll, the flywheel shall be stopped. The flywheel shall then immediately be accelerated at an average rate of 15 ft/sec/sec from 0 MPH to a speed of 138 MPH and then continued at an average rate of 11.1 ft/sec/sec from 138 MPH to a speed of 188 MPH. The tire shall be unlanded after a take-off roll distance of 2945 feet has been covered in approximately 20 seconds. The initial load of 5000 pounds shall be decreased linearly with time to 4300 pounds at 8 seconds after the start of the take-off roll and then decreased linearly with time to 2100 pounds at the time the tire is unlanded.

Test C Taxi-Take-Off - The tire shall be taxied on the flywheel at 40 MPH for 7500 feet with 4000 pounds load. Upon completion of the taxi roll, the flywheel shall be stopped. The flywheel shall then immediately be accelerated at an average rate of 22.5 ft/sec/sec from 0 MPH to a speed of 92 MPH and then continued at an average rate of 16.6 ft/sec/sec from 92 MPH to a speed of 193 MPH. The tire shall be unlanded after a take-off roll distance of 2270 feet has been covered in approximately 15 seconds. The initial load of 4000 pounds shall be decreased linearly with time to 2000 pounds at 11 seconds after the start of the take-off roll and decreased to 0 pounds at the time the tire is unlanded.

Test D Landing-Taxi - The tire shall be landed against a flywheel rotating at a peripheral speed of 58 MPH. The flywheel speed shall then be decreased until a roll distance of approximately 1020 feet has been covered. The average deceleration rate shall be 3.52 ft/sec/sec between 58 MPH and 0 MPH. The tire load shall be increased to 2800 pounds in 1 second after landing and remain constant until the end of the roll after a total time of approximately 24 seconds.

APPROVED 16 Oct 1974 REVISED

P.A. Other Cust	TITLE Tire - Aircraft, 26 x 7.75-13 (Navy)	MILITARY STANDARD MS 14159 (AS)
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET 1 OF 2

DD FORM 1 SEP 67 672-1 N LIMITED COORDINATION PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

Test D continued — Immediately following the landing cycle, the tire shall be taxied on the flywheel for 750 feet under 2800 pounds load at 12 MPH.

Test E — Landing-Taxi - The tire shall be landed against a flywheel rotating at a peripheral speed of 115 MPH. The flywheel speed shall then be decreased until a roll distance of approximately 2160 feet has been covered. The average deceleration rate shall be 6.62 ft/sec/sec between 115 MPH and 0 MPH. The tire load shall be increased to 1800 pounds in 2 seconds after landing and increased linearly with time to 5250 pounds at approximately 26 seconds after landing. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 2250 feet under 5250 pound load at 12 MPH.

Test F — Landing-Taxi - The tire shall be landed against a flywheel rotating at a peripheral speed of 195 MPH. The flywheel speed shall then be decreased until a roll distance of approximately 5600 feet has been covered. The average deceleration rate shall be 7.25 ft/sec/sec between 195 MPH and 0 MPH. The tire load shall be increased to 2500 pounds in 2 seconds after landing, and then increased linearly with time to 3150 pounds at approximately 39 seconds after landing. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 5250 feet under 3150 pounds load at 40 MPH.

Test G — Landing-Taxi - The tire shall be landed against a flywheel rotating at a peripheral speed of 183 MPH. The flywheel speed shall then be decreased until a roll distance of approximately 6450 feet has been covered. The average deceleration rate shall be 5.6 ft/sec/sec between 183 MPH and 0 MPH. The tire load shall be increased to 2500 pounds in 5 seconds after landing, and then increased linearly with time to 2650 pounds at approximately 48 seconds after landing. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 5250 feet under 2650 pounds load at 40 MPH.

Test H_1 — Turning-Taxi - The tire shall be landed against a flywheel rotating at a peripheral speed of 23 MPH with 5150 pounds load for a distance of 450 feet with the plane of the tire yawed left to produce a side load of 1850 pounds.

Test H_2 — Turning-Taxi - The same as Test H_1 but with the plane of the tire yawed right to produce a side load of 1850 pounds in the opposite direction.

Test I — Bruise Test - A tire inflated to 95 PSI shall be loaded against a 1-3/8 inch diameter length of plain round bar stock or arresting gear cable with a vertical load of 12,050 pounds. Immediately following the release of this load the tire shall be subjected to the same loading condition at a location 180 degrees in rotation from the initial point of loading.

Test J — Burst Test - The tire shall be subjected to a hydrostatic burst test. The pressure shall be increased until the tire fails and the failing pressure, description of failure, and location of failure shall be reported in the qualification test report.

Wear Depth Indicators - Tread wear indicators shall be provided to establish allowable wear of tread down to 1/32 inch from the bottom of the tread grooves. Oblong holes (3/4 x 3/16 inch) or round holes (7/16 inch diam.) located in the tread ribs. Indicators shall be located not more than 45 degrees apart.

Qualification Test Report - The qualification test report shall list the results of all qualification tests and construction details of the qualification test sample in the general form shown in Figure 6 of Specification MIL-T-5041 with dimensions listed at rated inflation and at 150 PSI. A sketch of the tire profile at rated and 150 PSI shall be included in the report. The report shall list the manufacturer's test number. Submit two copies of the Qualification Test Report, together with the data and material specified above and in MIL-T-5041 to the Naval Air Systems Command, Washington, D.C. 20361, Attention: AIR 530321A.

Referenced documents shall be of the issue in effect on date of invitation for bid.

APPROVED 16 Oct 1974 REVISED

P.A. Other Cust	TITLE Tire - Aircraft, 26 x 7.75-13 (Navy)	MILITARY STANDARD MS 14159 (AS)
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET 2 OF 2

DD FORM 1 APR 67 672-1 N — LIMITED COORDINATION — PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

OMB Approval No. 22-R255

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DOCUMENT IDENTIFIER AND TITLE

MS-14159(AS) TIRE - AIRCRAFT 25x 7.75-13(Navy)

NAME OF ORGANIZATION AND ADDRESS

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

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☐ YES ☐ NO *(If "Yes", in what way?)*

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