

NOTICE - When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded as an implication or acknowledgment on the part of the Government or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention, nor may in any way be related thereto.

This standard has been approved by the Naval Air Systems Command and is mandatory for use by all other military activities are required to employ this standard where suitable.

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 Min. Lbs.	Infl. Press Min. PSI	Burst Press Min. PSI	Bead Width Inch Max.	Weight Lbs. Max.	Static Unbal. Oz.-In. Max.	Tread	Mold Skid Depth Min.	Deflection + 2% - 4%
26 x 8.75-11	12XL <u>1/</u>	10,070	19,300	105	420 <u>2/</u>	1.55	30.0	8	Rib <u>3/</u>	.25	38%
<p><u>1/</u> TL - Tubeless Tire</p> <p><u>2/</u> - Tested Tire or New</p> <p><u>3/</u> - At least four, but not more than seven continuous-circumferential ribs. The grooves shall be shaped such that foreign objects will not become trapped between the ribs.</p>											
TIRE DATA											
A. Static Test Tire											
Inflated Outside Diameter (inch)		Inflated Section Width (inch)		Inflated Shoulder Diameter (inch)		Inflated Shoulder Width at Max. SH. DIA. Max. (inch)					
Min. Max.		Min. Max.		Max.							
25.75 26.55		8.45 8.95		23.75		7.90					
B. Dynamic Test Tire <u>4/</u>											
Grown and Thrown Inflated Outside Diameter (inch)		Grown Inflated Section Width (inch)		Grown Inflated Shoulder Diameter (inch)		Grown Inflated Shoulder Width at Max. SH. DIA. Max. (inch)					
Max.		Max.		Max.		Max. (inch)					
28.00		9.30		24.40		8.20					
<u>4/</u> 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)	Beel Radius (inch)	Flange Radius (inch)					
7.25	0.156	11.00	1.60	0.875	0.218	0.30					
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 Number 1 and Number 2 shall consecutively withstand the following dynamic test spectrum in alphabetical sequence followed by Test J. Minimum burst pressure for Test J shall be 420 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 K 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 occurs.											
Test A <u> taxi-Take-Off</u> - The tire shall be taxed on the flywheel at 40 MPH for 7,500 feet with 10,070 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 unladed after a take-off distance of 2,385 feet has been covered in approximately 18-19 seconds. The initial load of 10,070 pounds shall be decreased linearly with time to 7,500 pounds at 9 seconds after the start of the take-off roll and then decreased linearly with time to 3,000 pounds at the time the tire is unladed.											
Test B <u> taxi-Take-Off</u> - The tire shall be taxed on the flywheel at 40 MPH for 7,500 feet with 9,600 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 15.0 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 unladed after a takeoff roll distance of 2,945 feet has been covered in approximately 20 seconds. The initial load of 9,600 pounds shall be decreased linearly with time to 8,000 pounds at 8 seconds after the start of the takeoff roll and then decreased linearly with time to 3,000 pounds at the time the tire is unladed.											
Test C <u> taxi-Take-Off</u> - The tire shall be taxed on the flywheel at 40 MPH for 7,500 feet with 8,000 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 92 MPH and then continued at an average rate of 16.6 ft/sec/sec from 92 MPH to a speed of 173. The tire shall be unladed after a takeoff roll distance of 1,790 feet has been covered in approximately 13 seconds. The initial load of 8,000 pounds shall be decreased linearly with time to 7,000 pounds at 5 seconds											
P.A AS	TITLE						MILITARY STANDARD				
Other Cust	Tire, Aircraft, 26 x 8.75-11 (Navy)						MS 14160 (AS)				
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES						SHEET OF 1 2				

APPROVED 16 Oct 1974 REVISED

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This standard has been approved by the Naval Air Systems Command Department of the Navy and is mandatory for use by their activity. All other military activities are required to employ this standard where suitable.

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Test C	after the start of the takeoff roll and decreased to 0 pounds at the time the tire is unlanded.	
Test D	<u>Landing-Taxi</u> - 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 1,020 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 7,700 pounds in 1 second after landing and increased to 9,000 pounds when the tire is stopped, maintaining 9,000 pounds load, after a total time of approximately 24 seconds. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 750 feet under 9,000 pounds load at 12 MPH.	
Test E	<u>Landing-Taxi</u> - 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 2,160 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 5,100 pounds in 2 seconds after landing and increased to 8,500 pounds when the tire is stopped, maintaining 8,500 pounds load, after a total time of approximately 26 seconds. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 2,250 feet under 8,500 pounds load at 12 MPH.	
Test F	<u>Landing-Taxi</u> - 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 5,600 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 1,500 pounds in 2 seconds after landing, increased to 8,500 pounds at 25 seconds after landing and increased to 9,200 pounds when the tire is stopped, maintaining 9,200 pounds load, after a total time of approximately 39 seconds. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 5,250 feet under 9,200 pounds load at 40 MPH.	
Test G	<u>Landing-Taxi</u> - 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 6,450 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 6,500 pounds at 20 seconds after landing and increased to 9,000 pounds when the tire is stopped, maintaining 9,000 pounds load, after a total time of approximately 48 seconds. Immediately following the landing cycle, the tire shall be taxied on the flywheel for 5,250 feet under 9,000 pounds load at 40 MPH.	
Test H ₁	<u>Turning-Taxi</u> - The tire shall be taxied against the flywheel rotating at a peripheral speed of 23 MPH under 9,490 pounds load for a distance of 450 feet with the plane of the tire yawed left to produce a side load of 2,150 pounds.	
Test H ₂	<u>Turning-Taxi</u> - The tire shall be taxied against the flywheel rotating at a peripheral speed of 23 MPH under 9,490 pounds load for a distance of 450 feet with the plane of the tire yawed right to produce a side load of 2,150 pounds.	
Test I	<u>Bruise Test</u> - A tire inflated to 105 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 19,300 pounds. After release of this load, the tire shall be subjected to the same loading condition 180 degrees from the initial point of loading.	
Test J	<u>Burst Test</u> - 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 shall be reported in the qualification test report.	
<u>Wear Depth Indicators</u> - 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.		
<u>Qualification Test Report</u> - 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, DC 20361, Attn: AIR 530321A.		
Reference documents shall be of the issue in effect on date of invitation for bid.		
Project No. 2620-N078		
P.A. AS Other Cust	TITLE Tire, Aircraft, 26 x 8.75-11 (Navy)	MILITARY STANDARD MS 14160 (AS)
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES	SHEET 2 OF 2

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Washington, D.C. 20361

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