

FED. SUP CLASS  
2620THE TIRE SHALL BE IN ACCORDANCE WITH THE APPLICABLE  
REQUIREMENTS OF SPECIFICATION MIL-T-5041 EXCEPT AS SPECIFIED HEREIN

MS PART NO	SIZE	PLY RATING 1/	STATIC LOAD RATING LBS.	VERT LOAD LBS. MIN	INFL PRESS. PSI RATED	BURST PRESS. PSI MIN 2/	BEAD WIDTH INCH MAX	WEIGHT POUNDS MAX	STATIC UNBAL. OZ.-IN. MAX	TREAD 3/	HOLD SKID DEPTH MIN	DEFLEC. + 3% - 4%
MS26537-3	32x8.8	18TT	15,800	82,800	200	900	2.00	60.0	20	R18	.24	32%
MS26537-4	32x8.8	18TL	15,800	82,800	200	900	2.15	65.1	20	R18	.24	32%
1/ TT - TUBETYPE TIRE TL - TUBELESS TIRE		2/ NEW TIRE		3/ AT LEAST THREE, BUT NOT MORE THAN SEVEN CONTINUOUS CIRCUMFERENTIAL RIBS.								

THE TIRE COVERED BY THIS DRAWING SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE DURING ALL NORMAL OPERATIONS AT TAKEOFF AND LANDING SPEEDS INDICATED HEREIN ON ALL TYPES OF RUNWAYS AND ON AIRCRAFT CARRIERS.

**TIRE 1** THE TIRE SHALL WITHSTAND 75 CYCLES OF TEST A, 75 CYCLES OF TEST B, 5 CYCLES OF TEST C<sub>1</sub> AND 5 CYCLES OF TEST C<sub>2</sub> WITHOUT FAILURE AND THEN BE SUBJECTED TO TEST D.

**TIRE 2** THE TIRE SHALL BE INFLATED TO 320 PSI AND VERTICALLY LOADED TO 82,800 POUNDS OVER A 1 375 INCH DIAMETER STEEL BAR IN TWO LOCATIONS 180° APART ON THE TIRE. THE TIRE SHALL THEN WITHSTAND 25 CYCLES OF TEST A, AND 25 CYCLES OF TEST B WITHOUT FAILURE, THEN BE SUBJECTED TO TEST D.

**TIRE 3:** THE TIRE SHALL WITHSTAND A MINIMUM HYDROSTATIC BURST PRESSURE OF 900 PSI UNLESS THE BURST PRESSURE OF TIRES 1 AND 2 PASS TEST D. THE FAILING PRESSURE, DESCRIPTION OF FAILURE AND LOCATION SHALL BE REPORTED IN THE QUALIFICATION TEST REPORT.

**TEST A TAXI-TAKEOFF** - THE TIRE SHALL BE LOADED AGAINST A STATIONARY FLYWHEEL AT 15,800 POUNDS. THE FLYWHEEL SHALL THEN BE ACCELERATED TO 30 MPH AND TAXIED AT THIS SPEED, UNTIL A DISTANCE OF 10,000 FEET HAS BEEN COVERED. THE FLYWHEEL SHALL BE STOPPED UNDER FULL LOAD, THEN IMMEDIATELY ACCELERATED AT 3.5 FEET/SEC/SEC AVERAGE TO 200 MPH. THE LOAD SHALL BE DECREASED LINEARLY WITH TIME TO 14000 POUNDS AFTER 15 SECONDS, THEN DECREASED LINEARLY TO 0 POUNDS AT TAKE-OFF. TOTAL ROLL DISTANCE SHALL BE 12,350 ± 200 FEET AND THE ROLL TIME SHALL BE 84 SECONDS.

**TEST B LANDING-TAXI** - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 125 MPH. THE FLYWHEEL SHALL HAVE AN AVERAGE DECELERATION RATE OF 7.5 FEET/SEC/SEC FROM 125 MPH TO 30 MPH. THE LOAD SHALL INCREASE LINEARLY FROM 0 POUNDS AT INSTANT OF LANDING TO 4000 POUNDS IN 4 TO 5 SECONDS, THEN INCREASED LINEARLY TO 9500 POUNDS IN 12 SECONDS AFTER LANDING AND HELD AT THIS LOAD UNTIL THE ROLL DISTANCE OF APPROXIMATELY 2100 FEET HAS BEEN COVERED IN 18 TO 19 SECONDS. THE TIRE SHALL THEN BE TAXIED ON THE FLYWHEEL AT 30 MPH FOR 13,500 FEET WHILE UNDER THE 9500 POUND LOAD.

#### TEST C TAXI-YAW TEST

**C<sub>1</sub> LEFT YAW** - LAND THE TIRE AGAINST THE FLYWHEEL WITH THE PLANE OF THE TIRE YAWED LEFT AT AN ANGLE OF 5°. ONE CYCLE SHALL CONSIST OF A ROLL DISTANCE OF 10,000 FEET WITH A SPEED OF 30 MPH AND A 15,800 POUND LOAD.

**C<sub>2</sub> RIGHT YAW** - SAME AS C<sub>1</sub>, EXCEPT PLANE OF THE TIRE SHALL BE YAWED RIGHT AT AN ANGLE OF 5°.

**TEST D BURST TEST** - THE TIRE SHALL BE SUBJECTED TO A HYDROSTATIC BURST TEST. THE PRESSURE SHALL BE INCREASED UNTIL THE TIRE FAILS. THE FAILING PRESSURE, DESCRIPTION OF FAILURE AND LOCATION OF FAILURE SHALL BE REPORTED IN THE QUALIFICATION TEST REPORT.

**NOTE** - WHEN THE CONSTRUCTION OF THE CONVENTIONAL AND TUBELESS TIRES IS IDENTICAL, EXCEPT FOR THE TUBELESS TIRE INNER LINER, ONLY THE TUBELESS TIRE NEED BE QUALIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS DRAWING.

**AIR RETENTION** - THE TUBELESS TIRE SHALL BE INFLATED TO A PRESSURE OF 300 PSI AND ALLOWED TO STAND FOR A PERIOD OF 24 HOURS AT WHICH TIME THE PRESSURE DROP DUE TO GROWTH SHALL BE REPLACED. THE TIRE SHALL THEN STAND FOR AN ADDITIONAL 24 HOURS AT WHICH TIME THE PRESSURE SHALL BE MEASURED AND THE TIRE INSPECTED. THE AIR PRESSURE LOSS SHALL NOT EXCEED 5 PERCENT AND THE TIRE SHALL NOT REVEAL ANY APPEARANCE AND PERFORMANCE DEFECTS SUCH AS SIDEWALL BLISTERS, TREAD SEPARATION, ETC.

**QUALIFICATION TEST REPORT** - THE QUALIFICATION TEST REPORT SHALL LIST THE RESULTS OF ALL QUALIFICATION TESTS AND THE CONSTRUCTION DETAILS OF THE QUALIFICATION TEST SAMPLE IN THE GENERAL FORM SHOWN IN FIGURES 2 AND 3 OF MIL-T-5041. IN ADDITION, IT SHALL ALSO LIST THE ACTUAL DIMENSIONS WHEN THE TIRE IS INFLATED TO 300 PSI FOR 18 HR. THE REPORT SHALL INDICATE THE MANUFACTURER'S TEST NUMBER. TWO (2) COPIES OF THE QUALIFICATION TEST REPORT, TOGETHER WITH THE DATA AND MATERIAL SPECIFIED ABOVE, AND IN MIL-T-5041, SHALL BE SUBMITTED TO THE NAVAL AIR SYSTEMS COMMAND, WASHINGTON, DC, 20361. ATTENTION: AIR-53032.

#### NOTES

1. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS, OR REQUEST FOR PROPOSAL EXCEPT THAT REFERENCE ADOPTED INDUSTRY STANDARDS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
2. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

Ⓒ ENTIRE STANDARD REVISED

P.A NAVY — AS Other Cust	TITLE  TIRE, PNEUMATIC, AIRCRAFT, 32 x 8.8 TYPE VII (NAVY)	MILITARY STANDARD	
		MS26537(AS)	
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES.	SHEET 1	OF 1

DD FORM 672-1 (Limited coordination)  
1 SEP 71

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PROJECT NO. 2620-N238

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