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THE TIRE SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SPECIFICATION MIL-T-5041 EXCEPT AS SPECIFIED HEREIN

SIZE	PLY RATING 1/	STATIC LOAD RATING LBS.	VERT. LOAD LBS. MIN.	INFL. PRESS. PSI. MIN.	BURST PRESS. PSI. MIN. 2/	BEAD WIDTH IN. MAX.	WEIGHT POUNDS MAX.	STATIC UNBAL. Oz-in. MAX.	TREAD 3/	MOLD SKID DEPTH MIN.	DEFLEC. + 3% - 4%
24x5.5	16TT	11,500	52,000	355	1420	1.4	29.5	15	Rib	.35	32.0

1/ TT-Tube Type Tire 2/ New tire 3/ Three continuous circumferential Grooves - one groove in center of tread. Wide groove concept shall be used with radius at bottom of grooves to preclude stress risers and circumferential cracking. Tread shall be fabric-reinforced.

INFLATED DIMENSIONS @ 355 PSI (INCH)

CROSS SECTION		SHOULDER WIDTH		SHOULDER DIAMETER	OUTSIDE DIAMETER	
MIN	MAX	MIN	MAX	MAX	MIN	MAX
5.35	5.70	-	4.95	23.30	23.55	24.15

THE TIRE SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE DURING ALL NORMAL OPERATIONS AT TAKE-OFF SPEEDS OF NOT MORE THAN 200 MPH AND LANDING SPEEDS OF NOT MORE THAN 185 MPH ON ALL TYPES OF RUNWAYS AND ON AIRCRAFT CARRIERS.

TEST TIRE NUMBER 1 SHALL WITHSTAND TESTS A AND B WITHOUT FAILURE AND THEN USED FOR TEST C.
TEST TIRE NUMBER 2 SHALL WITHSTAND TESTS D AND E WITHOUT FAILURE AND THEN USED FOR TEST C.
TEST TIRE NUMBER 3 SHALL WITHSTAND A MINIMUM HYDROSTATIC BURST PRESSURE OF 1420 PSI. THE FAILING PRESSURE, DESCRIPTION OF FAILURE AND LOCATION SHALL BE REPORTED IN THE QUALIFICATION TEST REPORT AS TEST F.

TEST A - BRUISE TESTS - A NEW TIRE SHALL BE INFLATED WITH AIR TO 475 PSI AND LOADED AGAINST A ONE AND THREE EIGHTHS INCH (1-3/8") DIAMETER LENGTH OF PLAIN ROUND BAR STOCK OR CABLE. A VERTICAL LOAD OF 52,000 POUNDS SHALL BE APPLIED WITH THE VERTICAL CENTER-LINE OF THE MOUNTED TIRE MAKING AN ANGLE OF 87 DEGREES WITH THE PLATEN. IMMEDIATELY FOLLOWING THE RELEASE OF THIS LOAD THE TIRE SHALL BE SUBJECTED TO THE SAME LOADING CONDITION AT A SPOT 180 DEGREES FROM THE INITIAL POINT OF LOADING.

TEST B - DYNAMIC TEST - FOLLOWING TEST A, THE SAME TIRE SHALL BE SUBJECTED TO 25 DYNAMOMETER LANDINGS AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 185 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 5500 FEET HAS BEEN COVERED, AT WHICH TIME THE TIRE SHALL BE UNLANDED. THE AVERAGE DECELERATION RATE SHALL BE 6.6 FT/SEC/SEC THROUGHOUT THE RUN. THE TIRE LOAD SHALL BE INCREASED TO 5000 POUNDS WITHIN ONE SECOND OF LANDING AND FURTHER INCREASED LINEARLY WITH TIME TO A MAXIMUM OF 11,500 POUNDS WITHIN 14 TO 16 SECONDS AFTER LANDING. THE LOAD SHALL THEN BE MAINTAINED AT 11,500 POUNDS UNTIL THE TIRE IS UNLANDED AT APPROXIMATELY 37 SECONDS FROM TIME OF LANDING. THE INFLATION PRESSURE SHALL BE VARIED AS NECESSARY TO OBTAIN A STATIC INFLECTION OF 32% ON THE FLYWHEEL SURFACE AT A LOAD OF 11,500 POUNDS.

TEST C - BURST TEST NO.1 - FOLLOWING TEST B, THE SAME 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.

TEST D - YAW TEST - A NEW TIRE SHALL BE SUBJECTED TO 25 CYCLES OF TEST D_1 AND 25 CYCLES OF TEST D_2 FOR A TOTAL OF 50 CYCLES.

TEST D_1 - 1. (25 CYCLES) LAND TIRE ON FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 30 MPH WITH A PRE-SELECTED 3 DEGREE YAW ANGLE RELATIVE TO THE DYNAMOMETER.
2. INCREASE LOADING UNTIL THE TIRE IS LOADED WITH A RADIAL LOAD (IN THE WHEEL PLANE PERPENDICULAR TO FLYWHEEL) OF 11,500 POUNDS.
3. UNLAND THE TIRE WHEN A DISTANCE OF 300 FEET HAS BEEN COMPLETED WITH FULL LOAD.

TEST D_2 - (25 CYCLES) SAME AS TEST "D_1", EXCEPT THE 3 DEGREE YAW ANGLE SHALL BE APPLIED IN THE OPPOSITE DIRECTION.

TEST E - TAKEOFF TEST - FOLLOWING TEST D, THE SAME TIRE SHALL BE SUBJECTED TO 50 TAXI TAKEOFF CYCLES. THE VERTICAL CENTERLINE OF THE MOUNTED TIRE SHALL MAKE AN ANGLE OF 87 DEGREES WITH THE DYNAMOMETER FLYWHEEL AND THE LOAD APPLIED ON THE TIRE INBOARD SIDE. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 30 MPH FOR 10,000 FEET WITH 11,500 POUNDS LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE ACCELERATED AT AN AVERAGE RATE OF 4.6 FEET/SEC/SEC FROM 30 MPH TO A SPEED OF 200 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKEOFF ROLL DISTANCE OF 9,000 FEET HAS BEEN COVERED IN APPROXIMATELY 53 TO 55 SECONDS THE LOAD SHALL BE MAINTAINED AT 11,500 POUNDS FOR THE FIRST 6 SECONDS AFTER THE START OF THE TAKEOFF ROLL, AT WHICH TIME IT SHALL BE DECREASED LINEARLY WITH TIME TO 1,000 POUNDS AT 51 SECONDS AFTER THE START OF THE TAKEOFF ROLL AND DECREASED TO ZERO POUNDS AT THE TIME THE TIRE IS UNLANDED. THE TIRE DEFLECTION AT RATED LOAD ON THE FLYWHEEL SHALL BE THE SAME AS OBTAINED WITH THE RATED LOAD AND INFLATION PRESSURE ON A FLAT PLATE.

TEST F - BURST TEST NO. 2 - A NEW TIRE SHALL WITHSTAND A MINIMUM HYDROSTATIC BURST PRESSURE OF 1420 PSI.

(B) REVISED AND REDRAWN

APPROVED 3 JUNE 1963 REVISED (B) 29 DEC 1981

P.A. NAVY - AS Other Cust	TITLE TIRE, PNEUMATIC, AIRCRAFT, 24X5.5(200 MPH) FABRIC TREAD TYPE VII (NAVY)	MILITARY STANDARD MS 18060 (AS)
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES	SHEET 1 OF 2

DD FORM 672-1 (Related specification) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE PROJECT NO. 2620-N218 PLATE NO

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QUALIFICATION TEST REPORT - THE QUALIFICATION TEST REPORT SHALL LIST THE RESULTS OF ALL QUALIFICATION TESTS AND THE CONSTRUCTION TEST SAMPLE IN THE GENERAL FORM SHOWN IN FIGURE 6 AND 7 OF SPECIFICATION MIL-T-5041 WITH DIMENSIONS LISTED AT RATED INFLATION. IN ADDITION, IT SHALL ALSO LIST THE ACTUAL DIMENSIONS WHEN THE TIRE IS INFLATED TO 480 PSI. SUBMIT TWO (2) 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-530321.

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.

APPROVED 3 JUNE 1963 REVISED (B) FOR CHANGES SEE SHEETS 1 AND 2

P.A. NAVY - AS Other-Cost	TITLE TIRE, PNEUMATIC, AIRCRAFT, 24X5.5(200 MPH) FABRIC TREAD TYPE VII (NAVY)	MILITARY STANDARD MS 18060 (AS)
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET OF