

FED. SUP CLASS
2620

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 RATED	BURST PRESS PSI MIN 2/	BEAD WIDTH INCH MAX	WEIGHT POUNDS MAX	STATIC UNBAL. OZ - IN. MAX	TREAD 3/	MOLD SKID DEPTH MIN	DEFLEC. +3% -4%
28 x 9 0	22 TL	16,650	92,000	235	940	2 25	55 0	10	RIB	45	32%

1/ TL - TUBELESS TIRE 2/ NEW TIRE 3/ FIVE GROOVES WITH A 0.30 INCH MINIMUM WIDTH AT TOP OF GROOVE

TIRE DATA (INCH)

INFLATED OUTSIDE DIAMETER		INFLATED SECTION WIDTH		INFLATED SHOULDER DIAMETER	INFLATED SHOULDER WIDTH
MIN	MAX	MIN	MAX	MAX	MAX
26.80	27.50	8.35	8.85	24.80	7.80

RIM DATA (INCH)

WIDTH BETWEEN FLANGES	FLANGE WIDTH	LEDGE DIAMETER	LEDGE WIDTH	FLANGE HEIGHT	HEEL RADIUS	FLANGE RADIUS	FLANGE EDGE
7.00	1.00	12.00	2.25	1.25	.625	.625	.09

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 50 CYCLES OF TEST A, 50 CYCLES OF TEST B, 15 CYCLES OF TEST C, 15 CYCLES EACH OF TESTS D₁ AND D₂ AND 15 CYCLES EACH OF TESTS E₁ AND E₂ WITHOUT FAILURE, THEN BE SUBJECTED TO TEST F.

TIRE 2 THE TIRE SHALL BE INFLATED TO 375 PSI AND VERTICALLY LOADED TO 92,000 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 F.

TIRE 3 THE TIRE SHALL WITHSTAND A MINIMUM HYDROSTATIC BURST PRESSURE OF 940 PSI UNLESS THE BURST PRESSURE OF TIRES 1 AND 2 PASSES TEST F. 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 ON A STATIONARY FLYWHEEL AT 16,650 POUNDS. THE FLYWHEEL SHALL BE ACCELERATED TO 30 MPH UNDER THE LOAD AND TAXIED AT THIS SPEED FOR 10,000 FEET. THE FLYWHEEL SHALL BE STOPPED UNDER THE 16,650 POUND LOAD, THEN ACCELERATED AT AN AVERAGE RATE OF 10.12 FEET/SEC/SEC FROM 0 TO 80 MPH FROM 80 MPH TO 195 MPH AT AN AVERAGE ACCELERATION OF 7.26 FT/SEC/SEC, THEN FROM 195 MPH TO 201 MPH AT AN AVERAGE ACCELERATION OF 3.35 FT/SEC/SEC AT WHICH TIME THE TIRE IS UNLANDED. THE TAKEOFF ROLL DISTANCE OF 5950 FEET SHALL BE COVERED IN 37 TO 38 SECONDS. THE 16,650 POUND LOAD SHALL BE DECREASED LINEARLY WITH TIME TO 16,000 POUNDS AT 5 SECONDS, 6500 POUNDS AT 32 SECONDS AND TO ZERO LOAD AT TIME THE TIRE IS UNLANDED.

TEST B LANDING-TAXI - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 150 MPH. THE FLYWHEEL SHALL HAVE AN AVERAGE DECELERATION RATE OF 4.40 FT/SEC/SEC FROM 150 MPH TO 135 MPH, FOLLOWED BY AN AVERAGE DECELERATION RATE OF 7.05 FT/SEC/SEC TO 0 MPH. THE TOTAL ROLL DISTANCE OF 3850 FEET SHALL BE COVERED IN 33 TO 34 SECONDS. THE LOAD SHALL INCREASE LINEARLY WITH TIME FROM 0 POUNDS TO 5,000 POUNDS IN 5 SECONDS, TO 11,700 POUNDS AFTER 25 SECONDS AND TO 12,100 POUNDS IN 33 SECONDS. THE TIRE SHALL THEN BE TAXIED AT 30 MPH AND THE 12,100 POUND LOAD FOR 10,000 FEET.

TEST C CATAPULT TAKEOFF - THE TIRE SHALL BE LANDED AT A LOAD OF 45,000 POUNDS AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 34.5 MPH AND UNLANDED AFTER A DISTANCE OF 300 FEET HAS BEEN COVERED. AN INFLATION PRESSURE OF 375 PSI ADJUSTED FOR FLYWHEEL CURVATURE SHALL BE USED.

(E) ENTIRE STANDARD REVISED

DISTRIBUTION STATEMENT A. APPROVED FOR PUBLIC RELEASE. DISTRIBUTION IS UNLIMITED.
This military standard is approved by NAVAL AIR SYSTEMS COMMAND Department of the Navy and shall be used by their activity. All other military activities are required to employ this standard where suitable.

APPROVED 1 APR 1966 (E) 23 AUG 85 REVISED

P.A. NAVY - AS Other Cust	TITLE	MILITARY STANDARD	
	TIRE, PNEUMATIC, AIRCRAFT, 28 x 9.0, TYPE VII (NAVY)	MS90443(AS)	
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES	SHEET 1	OF 2

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TEST D TAKEOFF CAMBER

- D₁ PERFORM THE TEST A SPECTRUM WITH THE PLANE OF THE TIRE INCLINED INBOARD AT AN ANGLE OF 5 DEGREES.
- D₂ PERFORM THE TEST A SPECTRUM WITH THE PLANE OF THE TIRE INCLINED OUTBOARD AT AN ANGLE OF 5 DEGREES.

TEST E LANDING CAMBER

- E₁ PERFORM THE TEST B SPECTRUM WITH THE PLANE OF THE TIRE INCLINED INBOARD AT AN ANGLE OF 5 DEGREES
- E₂ PERFORM THE TEST B SPECTRUM WITH THE PLANE OF THE TIRE INCLINED OUTBOARD AT AN ANGLE OF 5 DEGREES.

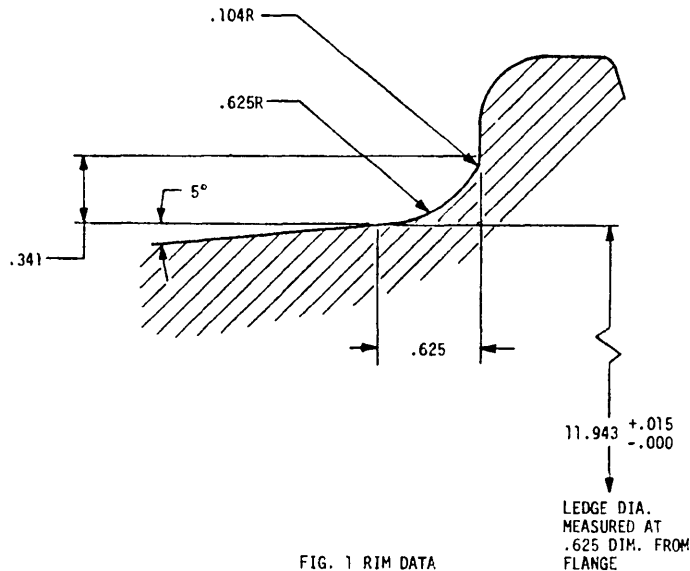
TEST F BURST TEST - THE TIRE SHALL BE SUBJECTED TO A HYDROSTATIC BURST TEST. THE PRESSURE SHALL BE INCREASED UNTIL THE TIRE FAILS. THE FAILING PRESSURE, DESCRIPTION OF FAILURE AND LOCATION OF FAILURE SHALL BE REPORTED IN THE QUALIFICATION REPORT.

AIR RETENTION - THE TUBELESS TIRE SHALL BE INFLATED TO A PRESSURE OF 375 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 PERFORMING 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, THE ACTUAL TIRE DIMENSIONS WHEN INFLATED TO 375 PSI SHALL BE LISTED. THE REPORT SHALL INDICATE THE MANUFACTURER'S TEST NUMBER. TWO (2) COPIES OF THE QUALIFICATION TEST REPORT, ALONG WITH THE DATA AND MATERIAL SPECIFIED ABOVE AND IN MIL-T-5041 SHALL BE SUBMITTED TO THE NAVAL AIR SYSTEMS COMMAND, WASHINGTON, D.C. 20361 ATTN: 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 REFERENCED 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 1 APR 1966 REVISED E FOR CHANGES SEE SHEETS 1 AND 2

This military standard is approved by NAVAL AIR SYSTEMS COMMAND, Department of the Navy and shall be used by that activity. All other military activities are required to employ this standard where suitable.

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PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES.	SHEET 2 OF 2