

FED. SUP CLASS
2620

THE TIRE SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS
OF MIL-R-7726 EXCEPT AS SPECIFIED HEREIN

SIZE	PLY RATING	STATIC LOAD RATING LBS.	INFL. PRESS. PSI RATED	BURST PRESS. PSI MIN.	BEAD WIDTH IN. MAX.	WEIGHT LBS. MAX.	STATIC UNBAL. OZ. IN. MAX.	TREAD	HOLD SKID DEPTH MIN.	DEFLEC. + 3% - 4%	
18x5.7	1/14 TL	6200	215	860	1.5	16.3	2.5	2/R18	.17	+ .03 - .00	32%

1/ TUBELESS

2/ THREE (3) CONTINUOUS CIRCUMFERENTIAL GROOVES, ONE GROOVE IN CENTER OF TREAD. TREAD SHALL BE FABRIC REINFORCED FOR MAXIMUM RELIABILITY AND RETENTION OF TREAD.

RIM DATA:

WIDTH BETWEEN FLANGES (INCH)	LEDGE DIAMETER (INCH)	FLANGE HEIGHT (INCH)	MIN. LEDGE WIDTH (INCH)	MIN. FLANGE WIDTH (INCH)	FLANGE RADIUS (INCH)	HEEL RADIUS (INCH)	FLANGE EDGE RADIUS (INCH)
4.25	8.00	.875	1.5	.750	.438	.219	.078

THIS TIRE SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE DURING ALL NORMAL OPERATIONS AT TAKE-OFF SPEEDS OF NOT MORE THAN 247 MPH AND LANDING SPEEDS OF NOT MORE THAN 190 MPH ON ALL TYPES OF RUNWAYS AND ON AIRCRAFT CARRIERS.

THE TIRE SHALL WITHSTAND WITHOUT FAILURE THE FOLLOWING TESTS:

TIRE 1:

DYNAMIC TEST (3 TIRES) - WITH THE TIRE INFLATED TO GIVE A RATED DEFLECTION AT RATED LOAD EACH OF THE THREE CONSECUTIVE TIRES OF THE SAME PRODUCTION CONFIGURATION SHALL WITHSTAND IN THE SEQUENCE ENUMERATED, WITHOUT EVIDENCE OF FAILURE 21 CYCLES OF TEST A, 2 CYCLES OF TEST B, 2 CYCLES OF TEST C, 25 CYCLES OF TEST D, AND 15 CYCLES OF TEST E.

TIRE ENVELOPE VERIFICATION - THE CONTOUR OF THE TIRE IS OPTIONAL. ADEQUATE MEASUREMENTS SHALL BE TAKEN TO VERIFY TIRE SECTION DIMENSIONS FOR EACH OF THE THREE DYNAMIC TEST TIRES BEFORE, DURING CYCLES 1, 10, 15, 21 (MAXIMUM THROUGH AND GROOVES), AND AFTER TEST A.

TEST A - TAXI-TAKE-OFF - TAXI THE TIRE ON THE FLYWHEEL FOR 9,000 FEET AT 40 MPH AND 6,200 POUNDS LOAD. STOP THE FLYWHEEL UNDER FULL LOAD AND WITHIN TWO MINUTES ACCELERATE AT AN AVERAGE RATE OF 12.0 FEET/SEC/SEC TO 230 MPH. THE LOAD SHALL BE DECREASED LINEARLY WITH TIME FROM 6,200 POUNDS TO 3,000 POUNDS AT THE END OF THE TAKE-OFF ROLL.

TEST B - TAXI OVERLOAD TAKE-OFF - TAXI THE TIRE ON THE FLYWHEEL FOR 9,000 FEET AT 40 MPH AND 6,200 POUNDS LOAD. STOP THE FLYWHEEL. INCREASE THE LOAD TO 9,350 POUNDS, AND WITHIN TWO MINUTES ACCELERATE AT AN AVERAGE RATE OF 11.97 FEET/SEC/SEC TO 236 MPH. THE LOAD SHALL BE DECREASED LINEARLY WITH TIME TO 7,200 POUNDS AT THE END OF THE TAKE-OFF ROLL.

TEST C - TAXI-TAKE-OFF AT ALTITUDE ON HOT DAY - THE TIRE SHALL BE TAXIED ON A FLYWHEEL FOR 7,000 FEET AT 40 MPH AND 6,200 POUNDS LOAD. STOP THE FLYWHEEL UNDER FULL LOAD AND WITHIN TWO MINUTES ACCELERATE AT AN AVERAGE OF 9.0 FEET/SEC/SEC TO 247 MPH. THE LOAD SHALL BE DECREASED LINEARLY WITH TIME FROM 6,200 POUNDS TO 3,000 POUNDS AT THE END OF THE TAKE-OFF ROLL.

TEST D - LANDING TAXI - THE TIRE SHALL BE LANDED AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 100 MPH. THE AVERAGE DECELERATION RATE SHALL BE 8.3 FEET/SEC/SEC FROM 190 MPH TO ZERO SPEED. THE TIRE SHALL BE LANDED AGAINST THE FLYWHEEL WITH A 10,000 POUNDS LOAD, DECREASED WITHIN TWO SECONDS TO 4,000 POUNDS, AND THEN INCREASED LINEARLY TO 3,500 POUNDS LOAD AT THE END OF THE LANDING ROLL. THE TIRE SHALL IMMEDIATELY CONTINUE ROLLING FROM THAT POINT AT 40 MPH AND 4,000 POUNDS LOAD UNTIL AN ADDITIONAL 9,000 FEET HAS BEEN COVERED.

TEST E - TAXI TO SIMULATE SIDE LOAD DURING TURNING - ONE CYCLE OF TEST "E" SHALL CONSIST OF ONE CYCLE OF "E"₁ AND ONE CYCLE OF "E"₂.

This standard has been approved by the NAVAL AIR SYSTEMS COMMAND, Department of the NAVY and shall be used by that activity. All other military activities are required to comply with standard where applicable.

ENTIRE STANDARD REDRACED.

P.A. NAVY - AS Other Com	TITLE	MILITARY STANDARD	
	TIRE, PNEUMATIC, AIRCRAFT, RESULT 18x5.7 (247 MPH) TYPE VII (NAVY)	MS3379 (AS)	
PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES:	SHEET	OF
		1	2

APPROVED 19 FEB 1969 REVISED A 29 DEC 1961

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E₁ - TAXI-SIDE LOAD ACTING INBOARD

1. LAND THE TIRE ON THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 35 MPH WITH A PRESELECTED 9-DEGREE YAW ANGLE.
2. INCREASE THE LOADING UNTIL THE TIRE IS LOADED WITH A RADIAL LOAD (IN THE WHEEL PLANE) OF 4,600 POUNDS.
3. UNLOAD THE TIRE WHEN A DISTANCE OF 300 FEET HAS BEEN COMPLETED WITH FULL LOAD.

E₂ - TAXI-SIDE LOAD ACTING OUTBOARD

SAME AS "E₁", EXCEPT THE 9-DEGREE YAW ANGLE SHALL BE APPLIED IN THE OPPOSITE DIRECTION.

TIRE 2:

GOVT LAB TEST - THIS TIRE SHALL BE RETREADED FROM THE SAME BATCH AS TEST TIRE 1 AND SHALL BE IDENTICALLY PROCESSED. THIS TIRE SHALL NOT BE CONTRACTOR TESTED AND SHALL BE PROVIDED FOR GOVERNMENT LABORATORY TESTING.

SECTION - A REPRESENTATIVE SECTION OF TIRE 1 AND TIRE 2 SHALL BE SUBMITTED TO A GOVERNMENT LABORATORY AS SPECIFIED IN MS 3377(AS).

AIR RETENTION - THE TUBELESS TIRE SHALL BE INFLATED TO A PRESSURE OF 350 PSI AND ALLOWED TO STAND FOR A PERIOD OF 4 HOURS AT WHICH TIME THE PRESSURE DROP DUE TO CROWTH SHALL BE REPLACED. THE TIRE SHALL THEN STAND FOR AN ADDITIONAL 12 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 OR PERFORMANCE DEFECTS, SUCH AS SIDEWALL BLISTERS, TREAD SEPARATION, ETC.

- NOTES - 1. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS 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 1R FEB 1969 REVISED (A) FOR CHANGES SEE SHEETS 1 AND 2

This standard has been approved by the 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.

P.A. NAVY - AS Other Case	TITLE	MILITARY STANDARD
	TIRE, PNEUMATIC, AIRCRAFT, REBUILT, 18x5.7 (247 MPH) TYPE VII (NAVY)	MS 3379 (AS)
PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES:	SHEET 2 OF 2