

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	BEAD WIDTH INCH MAX.	WEIGHT POUNDS MAX.	STATIC UNBAL. OZ-IN. MAX.	TREAD	MOLD SKID DEPTH MIN.	DEFLEC +3% -4%
22X6.6-10	20TL ₁ /	12,000	270	2.00	30.0	10.	RIB ₂ /	.30	32%
METRIC: 558.8X167.6-254mm									

1/ TL - TUBELESS TIRE2/ 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.TIRE DATA (INCH)

INFLATED OUTSIDE DIAMETER		INFLATED SECTION WIDTH		INFLATED SHOULDER DIAMETER		INFLATED SHOULDER WIDTH	
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
21.60	22.53	6.40	7.01	20.16		6.18	

RIM DATA (INCH)

WIDTH BETWEEN FLANGES	FLANGE WIDTH	LEDGE DIAMETER	LEDGE WIDTH	FLANGE HEIGHT	HEEL RADIUS	FLANGE RADIUS	FLANGE EDGE RADIUS
5.50	0.875	10.00	2.05	1.00	.250	.625	.1275

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.

TEST INFLATION PRESSURE - THE TEST INFLATION PRESSURE FOR DYNAMIC TESTS "A THRU G" SHALL BE ADJUSTED TO ENSURE TIRE DEFLECTION WITHIN DESIGN LIMITS.

FOUR TIRES SHALL BE SUBMITTED BY THE CONTRACTOR. THE TIRES SHALL BE REBUILT USING THE SAME COMPOUNDS AND PROCESSING TECHNIQUES. TIRES SHALL BE EXAMINED AS SPECIFIED BELOW:

TIRE 1:

DIMENSIONS - THE TIRE SHALL BE INFLATED TO 270 PSI AND ALLOWED TO STAND FOR 4 HOURS MINIMUM AT ROOM TEMPERATURE AFTER WHICH TIME THE PRESSURE DUE TO GROWTH SHALL BE REPLACED. THE REBUILT TIRE DIMENSION AT 400 PSI SHALL BE WITHIN THE DIMENSIONAL LIMITS SPECIFIED ABOVE.

DYNAMIC TEST - THE TIRE SHALL WITHSTAND 45 CYCLES OF TEST A, 32 CYCLES OF TEST B, 2 CYCLES OF TEST C, 1 CYCLE OF TEST D, 24 CYCLES OF TEST E, 24 CYCLES OF TEST F, AND 4 CYCLES OF TEST G WITHOUT FAILURE OR VISIBLE DETERIORATION OTHER THAN NORMAL EXPECTED TREAD WEAR.

TIRE 2:

DYNAMIC TEST - THE TIRE SHALL WITHSTAND 20 CYCLES OF TEST H, AND 25 CYCLES OF TEST A WITHOUT EVIDENCE OF FAILURE.

DYNAMIC TESTS:

TEST A - TAXI TAKEOFF - THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 30 MPH FOR 10,000 FEET WITH 5,500 POUNDS LOAD. IMMEDIATELY FOLLOWING THE TAXI ROLL, THE FLYWHEEL SHALL BE ACCELERATED AT AN AVERAGE RATE OF 7.87 FT./SEC./SEC. FROM 0 MPH TO A SPEED OF 145 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKEOFF ROLL DISTANCE OF 2,920 FEET HAS BEEN COVERED IN APPROXIMATELY 27 TO 28 SECONDS. THE INITIAL LOAD OF 4,160 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 3,000 POUNDS AT 26 SECONDS AFTER THE START OF THE TAKEOFF ROLL AND DECREASED TO ZERO POUNDS AT THE TIME THE TIRE IS UNLANDED.

P.A. NAVY - AS Other Cust	TITLE TIRE, PNEUMATIC, AIRCRAFT, REBUILT, 22X6.6-10, NEW DESIGN.	MILITARY STANDARD MS14187(AS)
PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES	SHEET 1 OF 2

APPROVED 21 JULY 1978 REVISED

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 indicated.

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- TEST B - LANDING - TAXI - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 156 MPH. THE FLYWHEEL SPEED SHALL THEN BE DECREASED UNTIL A ROLL DISTANCE OF APPROXIMATELY 4030 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 3.52 FEET/SEC/SEC BETWEEN 156 AND 132 MPH, AND 9.68 FEET/SEC/SEC BETWEEN 132 AND 0 MPH. THE TIRE LOAD SHALL BE INCREASED LINEARLY WITH TIME TO 3,000 POUNDS IN 1.5 SECONDS AFTER LANDING, INCREASED LINEARLY WITH TIME TO 3,600 POUNDS IN 8.5 SECONDS, INCREASED LINEARLY TO 5,900 POUNDS IN 3.5 SECONDS, AND MAINTAINED AT 5,900 POUNDS UNTIL THE TIRE IS UNLANDED AFTER A TOTAL TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY FOLLOWING THE LANDING CYCLE, TAXI THE TIRE ON THE FLYWHEEL FOR 10,000 FEET UNDER 5,500 POUNDS AT 30 MPH.
- TEST C - HIGH SPEED LANDING - TAXI - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 218 MPH. THE FLYWHEEL SPEED SHALL THEN BE DECREASED UNTIL A ROLL DISTANCE OF APPROXIMATELY 7995 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 3.26 FT/SEC/SEC BETWEEN 218 AND 198 MPH AND 8.0 FT/SEC/SEC BETWEEN 198 AND 0 MPH. THE TIRE LOAD SHALL BE INCREASED LINEARLY WITH TIME TO 2,000 POUNDS IN 1.5 SECONDS AFTER LANDING, MAINTAINED AT 2,000 POUNDS FOR 7 SECONDS, INCREASED LINEARLY TO 4,200 POUNDS IN 3.5 SECONDS, THEN DECREASED LINEARLY WITH TIME TO 3,400 POUNDS AT 45 SECONDS AFTER THE START OF THE LANDING ROLL. IMMEDIATELY FOLLOWING THE LANDING CYCLE, TAXI THE TIRE ON THE FLYWHEEL FOR 10,000 FEET UNDER 3,400 POUNDS AT 30 MPH.
- TEST D - REJECTED TAKEOFF - THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 30 MPH FOR 10,000 FEET WITH 5,500 POUNDS LOAD. IMMEDIATELY FOLLOWING THE TAXI ROLL, THE FLYWHEEL SHALL BE ACCELERATED AT AN AVERAGE RATE OF 10.5 FT/SEC/SEC FROM 0 MPH TO A SPEED OF 150 MPH, MAINTAINED AT 150 MPH FOR 2 SECONDS THEN DECELERATED AT AN AVERAGE RATE OF 12.2 FT/SEC/SEC FROM 150 MPH TO 0 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKEOFF ROLL DISTANCE OF 4730 FEET HAS BEEN COVERED IN APPROXIMATELY 41 SECONDS. THE INITIAL LOAD OF 5,500 POUNDS SHALL BE MAINTAINED FOR 5 SECONDS. DECREASED LINEARLY WITH TIME TO 3,600 POUNDS WITHIN 17 SECONDS (22 SECONDS FROM START). INCREASED LINEARLY TO 7,000 POUNDS WITHIN 2 SECONDS (24 SECONDS FROM START), AND MAINTAINED AT 7,000 POUNDS FOR 17 SECONDS (41 SECONDS FROM START), AT WHICH TIME THE TIRE IS UNLANDED. IMMEDIATELY AFTER THE TIRE IS UNLANDED, CONTINUE THE TAXI ROLL OUT AN ADDITIONAL 10,000 FEET WITH 5,500 POUNDS LOAD AT 30 MPH.
- TEST E - CAMBER - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 30 MPH WITH 6,850 POUNDS LOAD FOR A DISTANCE OF 2,500 FEET WITH THE PLANE OF THE TIRE INCLINED INBOARD AT AN ANGLE OF 15 DEGREES.
- TEST F - CAMBER - PERFORM THE TEST C SPECTRUM WITH THE PLANE OF THE TIRE INCLINED 15 DEGREES OUTBOARD.
- TEST G - LONG TAXI - THE TIRE SHALL BE LANDED ON THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 30 MPH FOR 30,000 FEET WITH 5,500 POUNDS LOAD.
- TEST H - CATAPULT CONDITION - ACCELERATE THE FLYWHEEL AT AN AVERAGE RATE OF 24 FT/SEC/SEC FROM 0 MPH TO 82 MPH. THE TIRE SHALL BE UNLANDED AFTER A ROLL DISTANCE OF 300 FEET HAS BEEN COVERED IN APPROXIMATELY 5 SECONDS. THE INITIAL LOAD OF 35,000 POUNDS SHALL BE MAINTAINED FOR 1 SECOND, DECREASED LINEARLY WITH TIME TO 17,500 POUNDS IN 3.5 SECONDS AND DECREASED TO ZERO POUNDS AT THE TIME THE TIRE IS UNLANDED. THE TIRE INFLATION PRESSURE SHALL BE 350 PSI CORRECTED FOR THE FLYWHEEL DIAMETER.

FLYWHEEL DIAMETER (INCH)	TIRE INFLATION PRESSURE (+10 PSI)
84	422
96	410
120	396

TIRES 3 AND 4: TIRES 3 AND 4 SHALL NOT BE SUBJECTED TO CONTRACTOR TESTING; HOWEVER, A HALF SECTION OF TIRE 3 AND THE COMPLETE TIRE 4, ALONG WITH A REPRESENTATIVE HALF SECTION OF TIRES 1 AND 2 AFTER DYNAMIC TESTS SHALL BE SUBMITTED TO THE COGNIZANT GOVERNMENT LABORATORY AS SPECIFIED IN MS3377.

NOTES:

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

APPROVED 21 JULY 1978 REVISED

P.A. NAVY - AS Other Cust	TITLE TIRE, PNEUMATIC, AIRCRAFT, REBUILT, 22 X 6.6-10 NEW DESIGN	MILITARY STANDARD MS14137(AS)
PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES:	SHEET 2 OF 2