

FED. SUP CLASS  
2620

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

SIZE	PLY RATING <u>1/</u>	STATIC LOAD RATING LBS.	VERT. LOAD RATING LBS.	INFL. PRESS. PSI MAX.	BURST PRESS. PSI MIN. <u>2/</u>	BEAD WIDTH INCH MAX.	WEIGHT POUNDS MAX.	STATIC UNBAL OZ-IN MAX.	TREAD <u>3/</u>	MOLD SKID DEPTH MIN. <u>4/</u>	DEFLEC. + 2% - 4%
26 x 7.75-13	10 TL	8,100	12,050	125	440	1.50	25.5	8	RIB	.25	34%

- 1/ TL-TUBELESS TIRE  
2/ TESTED TIRE OR NEW  
3/ AT LEAST THREE, BUT NOT MORE THAN SEVEN  
CONTINUOUS CIRCUMFERENTIAL RIBS, TREAD SHALL BE FABRIC REINFORCED.  
4/ RETREADABILITY NOT REQUIRED

**TIRE DATA****A. STATIC TEST TIRE**

INFLATED OUTSIDE DIAMETER (INCH)		INFLATED SECTION WIDTH (INCH)		INFLATED SHOULDER DIAMETER (INCH)		INFLATED SHOULDER WIDTH (INCH)	
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
25.60	26.30	7.50	8.00	23.90		6.95	

**B. DYNAMIC TEST TIRE 5/**

GROWN AND THROWN INFLATED OUTSIDE DIAMETER (INCH)		GROWN INFLATED SECTION WIDTH (INCH)		GROWN INFLATED SHOULDER DIAMETER (INCH)		GROWN INFLATED SHOULDER WIDTH AT MAX. SHOULDER DIAMETER MAX. (INCH)	
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
27.36		8.30		24.45		7.25	

5/ GROWN AND THROWN DIMENSIONS TO BE CONFIRMED DURING CYCLE 39 OF TEST A AND CYCLE 1 OF TEST D.

**RIM DATA**

WIDTH BETWEEN FLANGES (INCH)	FLANGE WIDTH (INCH)	LEDGE DIAMETER (INCH)	LEDGE WIDTH (INCH)	FLANGE HEIGHT (INCH)	HEEL RADIUS (INCH)	FLANGE RADIUS (INCH)
6.50	0.47	13.00	1.60	0.700	0.175	0.35

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

TEST TIRES NUMBER 1 AND 2 SHALL CONSECUTIVELY WITHSTAND THE FOLLOWING DYNAMIC TEST SPECTRUM IN ALPHABETICAL SEQUENCE.

TEST	A	B	C	D	E	F	G	H	J	K <sub>1</sub>	K <sub>2</sub>	L
CYCLES	40	7	1	1	29	14	5	1	1	49	49	1

TEST TIRE NUMBER 3 SHALL BE SUBJECTED TO TEST I, FOLLOWED BY 15 CYCLES OF TEST A, 15 CYCLES OF TEST E AND FOLLOWED BY TEST L.

TEST A TAXI/MAX WEIGHT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 8100 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT A RATE OF 15.97 FEET/SEC/SEC FROM 0 TO 136 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKE-OFF ROLL OF 1240 FEET HAS BEEN COVERED IN 12 TO 13 SECONDS. THE INITIAL LOAD OF 8100 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 4650 POUNDS AT 11.5 SECONDS, THEN LINEARLY DECREASED TO 0 POUNDS AT THE TIME THE TIRE IS UNLANDED. COMPLETE 39 CYCLES. COOL, RUN 40TH CYCLE WITH TIRE UNDERINFLATED 20%.

TEST B TAXI/NORMAL WEIGHT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 8100 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT AN AVERAGE RATE OF 14.40 FT/SEC/SEC FROM 0 TO 207 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKE-OFF ROLL OF

P.A. NAVY - AS	TITLE	MILITARY STANDARD
Other Cust	TIRE, PNEUMATIC, AIRCRAFT, 26 X 7.75-13 (NAVY) (AV-8B MLG)	MS14225(AS)
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET OF 1 2

This standard has been approved by the 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 26 FEB 1982 REVISED

3200 FEET HAS BEEN COVERED IN 21 TO 22 SECONDS. THE LOAD SHALL BE LINEARLY DECREASED WITH TIME FROM 8100 POUNDS TO 6000 POUNDS AT 4.2 SECONDS, THEN LINEARLY DECREASED TO 4000 POUNDS AT 16 SECONDS, THEN DECREASED LINEARLY TO 0 POUNDS AT THE TIME THE TIRE IS UNLANDED.

**TEST C** EXTENDED TAXI - SHORT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 13,200 FEET WITH 8100 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT AN AVERAGE RATE OF 15.97 FT/SEC/SEC FROM 0 TO 136 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKE-OFF ROLL OF 1240 FEET HAS BEEN COVERED IN 12 TO 13 SECONDS. THE INITIAL LOAD OF 8100 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 4650 POUNDS AT 11.5 SECONDS, THEN LINEARLY DECREASED TO 0 POUNDS AT THE TIME THE TIRE IS UNLANDED.

**TEST D** CONVENTIONAL TAKE-OFF (OVERSPEED). THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 8100 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT AN AVERAGE OF 14.78 FT/SEC/SEC FROM 0 TO 239 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKE-OFF ROLL OF 3850 FEET HAS BEEN COVERED IN 22 TO 23 SECONDS; THE INITIAL LOAD OF 8100 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 5000 POUNDS AT 11 SECONDS, THEN LINEARLY DECREASED TO 0 POUNDS AT THE TIME THE TIRE IS UNLANDED.

**TEST E** SHORT LANDING/TAXI. THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 118 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 2600 FEET HAS BEEN COVERED. THE AVERAGE RATE OF DECELERATION SHALL BE 5.76 FT/SEC/SEC FROM 118 MPH TO 0 MPH. THE LOAD SHALL BE INCREASED TO 2000 POUNDS IN 3.1 SECONDS, THEN LINEARLY INCREASED WITH TIME TO 5100 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY AFTER THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL FOR 9000 FEET AT 34.5 MPH WITH 5100 POUND LOAD. COMPLETE 28 CYCLES. COOL, RUN 29TH CYCLE WITH TIRE UNDERINFLATED 20%.

**TEST F** ROLLING VERTICAL LANDING/TAXI. THE TIRE SHALL BE LANDED AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 69 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF APPROXIMATELY 775 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 6.61 FT/SEC/SEC BETWEEN 69 MPH TO 0 MPH. THE TIRE LOAD SHALL BE INCREASED FROM 0 TO 1000 POUNDS AS RAPIDLY AS PRACTICABLE, THEN LINEARLY INCREASED WITH TIME TO 5100 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 15 SECONDS. IMMEDIATELY AFTER THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL FOR 9000 FEET AT 34.5 MPH WITH 5100 POUND LOAD.

**TEST G** CONVENTIONAL LANDING/TAXI. THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 183 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 6680 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.39 FT/SEC/SEC BETWEEN 183 MPH AND 0 MPH. THE TIRE LOAD SHALL BE LINEARLY INCREASED WITH TIME FROM 0 TO 2000 POUNDS AT 7 SECONDS, THEN LINEARLY INCREASED TO 4000 POUNDS AT 24.5 SECONDS, THEN LINEARLY INCREASED TO 4800 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 50 SECONDS. IMMEDIATELY AFTER THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 5100 POUND LOAD.

**TEST H** SHORT LANDING/EXTENDED TAXI. THE TIRE SHALL BE LANDED AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 118 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 2600 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.76 FT/SEC/SEC FROM 118 MPH TO 0 MPH. THE LOAD SHALL BE INCREASED TO 2000 POUNDS IN 3.1 SECONDS, THEN LINEARLY INCREASED WITH TIME TO 5100 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY AFTER THE LANDING THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 13,200 FEET WITH 5100 POUND LOAD.

**TEST J** REJECTED TAKE-OFF. THIS TEST SHALL CONSIST OF THE PROCEDURE OF TEST "A" TO SIMULATE TAKEOFF, FOLLOWED IMMEDIATELY BY LANDING THE TIRE AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 138 MPH AND AN IMMEDIATE TIRE LOADING OF 4750 POUNDS. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF APPROXIMATELY 3800 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.39 FT/SEC/SEC BETWEEN 138 MPH AND 0 MPH. THE INITIAL LOAD OF 4750 POUNDS SHALL BE LINEARLY INCREASED WITH TIME TO 6700 POUNDS AT 20 SECONDS, THEN LINEARLY INCREASED TO 7150 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 37 SECONDS. IMMEDIATELY AFTER LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 7150 POUND LOAD.

**TEST K<sub>1</sub>** TURNING TAXI (LEFT). THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 34.5 MPH WITH 7580 POUND LOAD FOR 300 FEET WITH THE PLANE OF THE TIRE YAWED LEFT TO PRODUCE A SIDE LOAD OF 2100 POUNDS.

**TEST K<sub>2</sub>** TURNING TAXI (RIGHT). SAME AS K<sub>1</sub> EXCEPT WITH THE PLANE OF THE TIRE YAWED RIGHT TO PRODUCE A SIDE LOAD OF 2100 POUNDS.

**TEST L** 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.

**TEST I** BRUISE TEST. A TIRE INFLATED TO 125 PSI SHALL BE LOADED AGAINST A 1-3/8 INCH DIAMETER LENGTH OF PLAIN ROUND BAR STOCK OR ARRESTING GEAR CABLE WITH A VERTICAL LOAD OF 12050 POUNDS. IMMEDIATELY FOLLOWING THE RELEASE OF THIS LOAD THE TIRE SHALL BE SUBJECTED TO THE SAME LOADING CONDITION AT A LOCATION 180 DEGREES IN ROTATION FROM THE INITIAL POINT OF LOADING.

**QUALIFICATION TEST REPORT** - THE QUALIFICATION TEST REPORT SHALL LIST THE RESULTS OF ALL QUALIFICATION TESTS AND CONSTRUCTION DETAILS OF THE QUALIFICATION TEST SAMPLE IN THE GENERAL FORM SHOWN IN FIGURES 2 AND 3 OF MIL-T-5041 WITH DIMENSIONS LISTED AT RATED INFLATION AND AT 200 PSI. A SKETCH OF THE TIRE PROFILE AT RATED INFLATION AND AT 200 PSI. A SKETCH OF THE TIRE PROFILE AT RATED AND 200 PSI SHALL BE INCLUDED IN THE REPORT. THE REPORT SHALL LIST THE MANUFACTURER'S TEST NUMBER. SUBMIT TWO 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 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 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 26 FEB 1982 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 suitable.

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	TIRE, PNEUMATIC, AIRCRAFT, 26 X 7.75-13 (NAVY) (AV-8B MLG)	MS14225(AS)	
PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES.	SHEET	OF
		2	2