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 1/	STATIC LOAD RATING LBS.	VERT. LOAD LBS. MIN.	INFL. PRESS. PSI MAX.	BURST PRESS. PSI MIN. 2/	BEAD WIDTH INCH MAX.	WEIGHT POUNDS MAX.	STATIC UNBAL OZ-IN. MAX.	TREAD 3/	MOLD SKID DEPTH MIN. 4/	DEFLEC. + 3% - 4%
13.5 X 6.00-4	14TL	3,450	7,500	135	475	0.94	7.15	5	RIB	0.20	33%

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 AT MAX. SH. DIA. MAX. (INCH)
MIN.	MAX.	MIN.	MAX.	MAX.	
13.20	13.75	5.75	6.10	12.00	5.40

B. DYNAMIC TEST TIRE 5/

GROWN AND THROWN INFLATED OUTSIDE DIAMETER (INCH) MAX.	GROWN INFLATED SECTION WIDTH (INCH) MAX	GROWN INFLATED SHOULDER DIAMETER (INCH) MAX.	GROWN INFLATED SHOULDER WIDTH AT MAX. SH. DIA. MAX. (INCH)
14.53	6.35	12.40	5.60

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)	FLANGE HEIGHT (INCH)	REEL RADIUS (INCH)	FLANGE RADIUS (INCH)	LEDGE WIDTH (INCH)
4.75	.435	4.00	0.55	0.134	0.275	0.75

THE TIRE COVERED BY THIS DRAWING SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE DURING ALL NORMAL OPERATIONS OF 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_1	K_2	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.

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PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET 1 OF 3

DD FORM 672-1 (Limited coordination) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PLATE NO.

PROJECT NO. 2620-N229

TEST A — TAXI/MAX WEIGHT SHORT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 2,175 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 2175 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 1050 POUNDS AT 12 SECONDS, THEN LINEARLY DECREASED TO 0 POUNDS AT LIFT-OFF. COMPLETE 39 CYCLES. COOL, RUN 40TH CYCLE WITH TIRE UNDERINFLATED 20%.

TEST B — TAXI/NORMAL WEIGHT SHORT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 2175 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 MPH TO 207 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKE-OFF ROLL OF 3200 FEET HAS BEEN COVERED IN 21 TO 22 SECONDS. THE INITIAL LOAD OF 2,175 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 1000 POUNDS AT 15.5 SECONDS, THEN LINEARLY DECREASED TO 720 POUNDS AT 20 SECONDS, THEN LINEARLY DECREASED TO 0 POUNDS AT LIFT-OFF.

TEST C — EXTENDED TAXI/SHORT TAKE-OFF. THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 13,200 FEET WITH 1450 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 1450 POUNDS SHALL BE LINEARLY DECREASED WITH TIME TO 1050 POUNDS AT 10.7 SECONDS, THEN DECREASED LINEARLY WITH TIME TO 0 POUNDS AT LIFT-OFF.

TEST D — TAXI/CONVENTIONAL TAKE-OFF (OVERSPEED). THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 1475 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT AN AVERAGE OF 14.78 FEET/SEC/SEC FROM 0 TO 230 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 1475 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 1000 POUNDS AT 14.8 SECONDS, THEN LINEARLY DECREASED TO 580 POUNDS AT 22.5 SECONDS, THEN TO 0 POUNDS AT LIFT-OFF.

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 DECELERATION RATE SHALL BE 5.76 FT/SEC/SEC FROM 118 MPH TO 0 MPH. THE LOAD SHALL BE LINEARLY INCREASED WITH TIME FROM 0 TO 840 POUNDS AT 7.6 SECONDS, THEN LINEARLY INCREASED TO 1150 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY AFTER LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 1150 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 A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 69 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 775 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 6.61 FT/SEC/SEC BETWEEN 69 MPH AND 0 MPH. THE TIRE LOAD SHALL BE LINEARLY INCREASED WITH TIME FROM 0 POUNDS TO 925 POUNDS AT .25 SECONDS, THEN LINEARLY INCREASED TO 1025 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 15 SECONDS. IMMEDIATELY AFTER LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 1150 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 775 POUNDS AT 1 SECOND, THEN LINEARLY INCREASED WITH TIME TO 1025 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 50 SECONDS. IMMEDIATELY AFTER LANDING THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 1150 POUND LOAD.

TEST H — SHORT LANDING/EXTENDED 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 DECELERATION RATE SHALL BE 5.76 FT/SEC/SEC FROM 118 MPH TO 0 MPH. THE LOAD SHALL BE LINEARLY INCREASED WITH TIME FROM 0 TO 840 POUNDS AT 7.6 SECONDS, THEN LINEARLY INCREASED WITH TIME TO 1150 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 1450 POUND LOAD.

TEST J — REJECTED TAKE-OFF. THIS TEST SHALL CONSIST OF THE PROCEDURE OF TEST "A" TO SIMULATE TAKE-OFF, FOLLOWED IMMEDIATELY BY LANDING THE TIRE AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 138 MPH WITH AN IMMEDIATE TIRE LOADING OF 1150 POUNDS. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF 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 1150 POUNDS SHALL BE LINEARLY INCREASED WITH TIME TO 1280 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 1150 POUND LOAD.

TEST K_1 — TURNING TAXI (LEFT). THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 34.5 MPH FOR 300 FEET WITH 4520 POUNDS VERTICAL LOAD AND WITH PLANE OF TIRE YAWED LEFT AT AN ANGLE OF 7.0 DEGREES AND CAMBERED OUTBOARD AT 4.0 DEGREES.

TEST K_2 — TURNING TAXI (RIGHT). SAME AS K_1 EXCEPT WITH PLANE OF TIRE YAWED RIGHT AT AN ANGLE OF 7.0 DEGREES AND CAMBERED INBOARD AT 4.0 DEGREES."

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 135 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 7500 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.

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PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET 2 OF 3

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 FIGURE 6 OF MIL-T-5041 WITH DIMENSIONS LISTED 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.

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PROCUREMENT SPECIFICATION MIL-T-5041	SUPERSEDES:	SHEET 3 OF 3