

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 LBS. min. | 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% |
|----------------|----------------------------|----------------------------------|-------------------------------|--------------------------------|--|-------------------------------|--------------------------|-----------------------------------|--------------------|---|-------------------------|
| 26.0 X 8.75-11 | 16 TL | 11,000 | 19,300 | 125 | 440 | 1.85 | 26.8 | 8 | RIB | .25 | 38% |

1/ TL-TUBELESS TIRE2/ TESTED TIRE OR NEW3/ 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. TREAD SHALL BE FABRIC REINFORCED.4/ RETREADABILITY NOT REQUIREDTIRE DATAA. 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. | |
| 25.75 | 26.55 | 8.45 | 9.10 | 23.75 | 7.90 |

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. SH. DIA. MAX. (INCH) |
|---|---|---|---|
| MAX. | MAX. | MAX. | |
| 27.79 | 9.30 | 24.40 | 8.20 |

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) |
|---------------------------------------|---------------------------|-----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| 7.25 | 0.86 | 11.00 | 1.85 | 0.875 | 0.218 | 0.30 |

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 AND 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.

P.A. NAVY - AS
Other Cast

TITLE

TIRE, PNEUMATIC, AIRCRAFT, 26.0 X 8.75 - 11 (NAVY)
(AV-8B NLG)

MILITARY STANDARD

MS14223(AS)

PROCUREMENT SPECIFICATION
MIL-T-5041

SUPERSEDES:

SHEET 1 OF 3

APPROVED 26 FEB 1982 REVISED

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.

FED. SUP CLASS

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- TEST A** TAXI/MAX WEIGHT SHORT TAKE-OFF - THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 11,070 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 TAKEOFF ROLL OF 1240 FEET HAS BEEN COVERED IN 12 TO 13 SECONDS. THE INITIAL LOAD OF 11,070 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 10,000 POUNDS AT 1 SECOND, THEN DECREASED LINEARLY WITH TIME TO 6500 POUNDS AT 12 SECONDS, THEN 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 11,070 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT A RATE OF 14.40 FEET/SEC/SEC FROM 0 TO 207 MPH. THE TIRE SHALL BE UNLANDED AFTER A TAKEOFF ROLL OF 3200 FEET HAS BEEN COVERED IN 21 TO 22 SECONDS. THE INITIAL LOAD OF 11,070 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 9200 POUNDS AT 1.4 SECONDS, THEN LINEARLY DECREASED TO 3000 POUNDS AT 20 SECONDS, THEN DECREASED 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 11,070 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 TAKEOFF ROLL OF 1240 FEET HAS BEEN COVERED IN 12 TO 13 SECONDS. THE INITIAL LOAD OF 11,070 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 10,000 POUNDS AT 1 SECOND, THEN DECREASED LINEARLY WITH TIME TO 6500 POUNDS AT 12 SECONDS, THEN TO 0 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 11,070 POUND LOAD. UPON COMPLETION OF THE TAXI ROLL, THE FLYWHEEL SHALL BE STOPPED, THEN IMMEDIATELY ACCELERATED AT A RATE 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 11,070 POUNDS SHALL BE DECREASED LINEARLY WITH TIME TO 10,000 POUNDS AT 1.8 SECONDS, THEN DECREASED LINEARLY WITH TIME TO 2000 POUNDS AT 22.5 SECONDS, THEN TO 0 POUNDS AT THE TIME THE TIRE IS UNLANDED.
- TEST E** SHORT LANDING-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 APPROXIMATELY 2600 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.76 FEET/SEC/SEC BETWEEN 118 AND 0 MPH. THE TIRE LOAD SHALL BE INCREASED LINEARLY WITH TIME FROM 3750 POUNDS AT TOUCHDOWN TO 5500 POUNDS AT 12.6 SECONDS, THEN INCREASED WITHIN 0.5 SECONDS TO 7800 POUNDS, THEN INCREASED LINEARLY WITH TIME TO 9200 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY FOLLOWING THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL FOR 9000 FEET AT 34.5 MPH WITH 7,070 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 APPROXIMATELY 775 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 6.61 FEET/SEC/SEC BETWEEN 69 AND 0 MPH. THE TOUCHDOWN TIRE LOAD OF 7700 POUNDS SHALL BE INCREASED LINEARLY WITH TIME TO 9050 POUNDS AFTER 8 SECONDS, THEN LINEARLY INCREASED WITH TIME TO 9200 POUNDS AT THE END OF THE LANDING TIME OF APPROXIMATELY 15 SECONDS. IMMEDIATELY FOLLOWING THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL FOR 9000 FEET AT 34.5 MPH WITH 7,070 POUND LOAD.
- TEST G** CONVENTIONAL LANDING - TAXI. THE TIRE SHALL BE LANDED AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 183 MPH. THE FLYWHEEL SPEED SHALL BE DECREASED UNTIL A ROLL DISTANCE OF APPROXIMATELY 6680 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.39 FEET/SEC/SEC BETWEEN 183 AND 0 MPH. THE TIRE LOAD SHALL BE INCREASED LINEARLY WITH TIME FROM 1600 POUNDS AT TOUCHDOWN TO 7000 POUNDS AT 21 SECONDS, THEN LINEARLY INCREASED WITH TIME TO 9500 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 50 SECONDS. IMMEDIATELY FOLLOWING THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 7070 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 APPROXIMATELY 2600 FEET HAS BEEN COVERED. THE AVERAGE DECELERATION RATE SHALL BE 5.76 FEET/SEC/SEC BETWEEN 118 AND 0 MPH. THE LOAD SHALL BE INCREASED LINEARLY WITH TIME FROM 3750 POUNDS AT TOUCHDOWN TO 5500 POUNDS AT 12.6 SECONDS, THEN INCREASED WITHIN 0.5 SECONDS TO 7800 POUNDS, FOLLOWED BY A LINEAR INCREASE WITH TIME TO 9200 POUNDS AT THE END OF THE TOTAL LANDING TIME OF APPROXIMATELY 30 SECONDS. IMMEDIATELY FOLLOWING THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 13200 FEET WITH 11,070 POUND LOAD.
- TEST J** REJECTED TAKE-OFF - THIS TEST SHALL CONSIST OF THE PROCEDURE TEST "A" TO SIMULATE TAKE-OFF, FOLLOWED IMMEDIATELY BY LANDED THE TIRE AGAINST THE FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 138 MPH AND AN IMMEDIATE TIRE LOADING OF 9200 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 FEET/SEC/SEC BETWEEN 138 AND 0 MPH. THE TOUCHDOWN LOAD OF 9200 POUNDS SHALL BE INCREASED LINEARLY WITH TIME TO 11,200 POUNDS AT 7.5 SECONDS, THEN INCREASED LINEARLY TO 14,200 POUNDS AT THE COMPLETION OF THE TOTAL LANDING TIME OF APPROXIMATELY 37 SECONDS. IMMEDIATELY FOLLOWING THE LANDING, THE TIRE SHALL BE TAXIED ON THE FLYWHEEL AT 34.5 MPH FOR 9000 FEET WITH 14200 POUND LOAD.
- TEST K₁** TURNING TAXI (LEFT) - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 34.5 MPH WITH 10,500 POUND LOAD FOR A DISTANCE OF 300 FEET WITH THE PLANE OF THE TIRE YAWED LEFT TO PRODUCE A SIDE LOAD OF 2710 POUNDS.
- TEST K₂** TURNING TAXI (RIGHT) - SAME AS K₁ EXCEPT, WITH THE PLANE OF THE TIRE YAWED RIGHT TO PRODUCE A SIDE LOAD OF 2710 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.

APPROVED 26 FEB 1982 REVISED

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| P.A. NAVY - AS Other Cust | TITLE TIRE, PNEUMATIC, AIRCRAFT, 26.0 X 8.75 - 11 (NAVY) (AV-8B NLG) | MILITARY STANDARD | |
| PROCUREMENT SPECIFICATION NII-T-5041 | SUPERSEDES: | MS14223(AS) | |
| | | SHEET | 2 OF 3 |

FED. SUP CLASS
2620

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 19300 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 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 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

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| P.A. NAVY - AS Other Cust | TITLE TIRE, PNEUMATIC, AIRCRAFT, 26.0 X 8.75 - 11 (NAVY) (AV-8B NLG) | MILITARY STANDARD MSI4223(AS) |
| PROCUREMENT SPECIFICATION MIL-T-5041 | SUPERSEDES: | SHEET 3 OF 3 |