

FED. SUP CLASS  
2620

THE TIRE SHALL BE IN ACCORDANCE WITH THE APPLICABLE

REQUIREMENTS OF MIL-T-5041 EXCEPT AS SPECIFIED HEREIN

| MS PART NO | SIZE   | TYPE | PLY RATING | STATIC LOAD RATING LBS. | VFRT. LOAD LBS. min. | INFL. PRESS. PSI max. | BURST PRESS. PSI min | BEAD WIDTH INCH max. | WFIGHT POUNDS max. | STATIC UNBAL. oz-in | TREAD | MOLD SKID DEPTH min. | DEFLEC. + 3% - 4% |
|------------|--------|------|------------|-------------------------|----------------------|-----------------------|----------------------|----------------------|--------------------|---------------------|-------|----------------------|-------------------|
|            |        | 1/   |            |                         |                      |                       | 2/                   |                      |                    |                     | 3/    |                      |                   |
| MS26558-1  | 24x7.7 | TT   | 10         | 5100                    | 35,000               | 85                    | 380                  | 1.25                 | 25.0               | 17                  | RIB   | 0.35                 | 32.0              |
| MS26558-2  | 24x7.7 | TL   | 10         | 5100                    | 35,000               | 85                    | 380                  | 1.40                 | 29.0               | 17                  | RIB   | 0.35                 | 32.0              |
| MS26558-3  | 24x7.7 | TT   | 14         | 8200                    | 46,000               | 135                   | 610                  | 1.50                 | 31.0               | 17                  | RIB   | 0.35                 | 32.0              |
| MS26558-4  | 24x7.7 | TL   | 14         | 8200                    | 46,000               | 135                   | 610                  | 1.65                 | 35.0               | 17                  | RIB   | 0.35                 | 32.0              |

1/ TT-Tube type Tire

TL-Tubeless Tire

2/ New tire

3/ At least three, but not more than seven continuous circumferential ribs.

| Tire Data (Inch) |                    |                   |                   |                    |                     |                     | Rim Data (Inch)       |              |            |             |            |           |
|------------------|--------------------|-------------------|-------------------|--------------------|---------------------|---------------------|-----------------------|--------------|------------|-------------|------------|-----------|
| SIZE             | CROSS SECTION min. | OUTSIDE DIA. min. | OUTSIDE DIA. max. | SHOULDER DIA. max. | SHOULDER WIDTH min. | SHOULDER WIDTH max. | WIDTH BETWEEN FLANGES | FLANGE WIDTH | FLANGE HT. | LEDGE WIDTH | LEDGE DIA. | HEEL RAD. |
| 24x7.7           | 7.20               | 7.65              | 23.30             | 24.15              | 21.50               | 6.75                | 5.50                  | .75          | .906       | 1.75        | 10.00      | .219      |

THE TIRE COVERED BY THIS DRAWING SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE DURING ALL NORMAL OPERATIONS AT TAKE-OFF SPEEDS OF NOT MORE THAN 140 KNOTS AND LANDING SPEEDS OF NOT MORE THAN 120 KNOTS ON ALL TYPES OF RUNWAYS AND ON AIRCRAFT CARRIERS.

THE TIRE SHALL WITHSTAND WITHOUT FAILURE THE TESTS SPECIFIED IN PARAGRAPHS (1), (2) AND (4):

- (1) BRUISE TESTS - THE TIRE SHALL BE INFLATED WITH AIR TO 135 PSI FOR 10 PR AND 216 PSI FOR 14 PR AND LOADED AGAINST A ONE AND THREE EIGHTHS INCH (1-3/8") DIAMETER LENGTH OF PLAIN ROUND BAR STOCK. A VERTICAL LOAD AS APPLICABLE TO THE PLY RATING SPECIFIED ABOVE SHALL BE APPLIED WITH THE VERTICAL CENTERLINE OF THE MOUNTED TIRE MAKING AN ANGLE OF 90 DEGREES WITH THE PLATE. IMMEDIATELY FOLLOWING THE RELEASE OF THIS LOAD THE TIRE SHALL BE SUBJECTED TO THE SAME LOADING CONDITION AT A SPOT 180 DEGREES FROM THE INITIAL POINT OF LOADING.
- (2) DYNAMIC TEST - FOLLOWING THE ABOVE BRUISE TEST THE SAME TIRE SHALL BE SUBJECTED TO 25 DYNAMOMETER LANDINGS AT A SPEED OF 120 MPH WITH AN UNLANDING SPEED CALCULATED TO MAKE THE TIRE ABSORB 80% OF THE INITIAL FLY WHEEL ENERGY WHEN COMPUTED IN ACCORDANCE WITH SPECIFICATION MIL-T-5041. THE STATIC LOAD SHALL BE AS APPLICABLE TO THE PLY RATING SPECIFIED ABOVE AND THE INFLATION PRESSURE VARIED AS NECESSARY TO PRODUCE A STATIC DEFLECTION OF 32% ON THE FLY WHEEL SURFACE.
- (3) BURST TEST - FOLLOWING THE ABOVE DYNAMIC TEST THE SAME TIRE SHALL BE SUBJECTED TO A HYDROSTATIC BURST TEST. THE PRESSURE SHALL BE INCREASED UNTIL THE TIRE FAILS AND THE FAILING PRESSURE REPORTED IN THE QUALIFICATION TEST REPORT.
- (4) DYNAMOMETER TEST - A NEW TIRE SHALL BE SUBJECTED TO 50 HIGH SPEED (120-90 MPH) AND 50 LOW SPEED (90-0 MPH) LANDINGS AS DESCRIBED IN SPECIFICATION MIL-T-5041.

AIR RETENTION - THE TUBELESS TIRE SHALL BE INFLATED TO A PRESSURE OF 135 PSI FOR 10 PR AND 216 PSI FOR 14 PR AND ALLOWED TO STAND FOR A PERIOD OF 24 HOURS AT WHICH TIME THE PRESSURE DROP DUE TO GROWTH SHALL BE REPLACED. THE TIRE SHALL THEN STAND FOR AN ADDITIONAL 24 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 AND PERFORMANCE DEFECTS SUCH AS SIDEWALL BLISTERS, TRIAD SEPARATION, ETC.

QUALIFICATION TEST REPORT - THE QUALIFICATION TEST REPORT SHALL LIST THE RESULTS OF ALL QUALIFICATION TESTS AND THE 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. IN ADDITION, IT SHALL ALSO LIST THE ACTUAL DIMENSIONS WHEN THE TIRE IS INFLATED TO 135 PSI FOR 10 PR AND 216 PSI FOR 14 PR. SUBMIT TWO (2) COPIES OF THE QUALIFICATION TEST REPORT, TOGETHER WITH THE DATA AND MATERIAL SPECIFIED ABOVE, TO NAVAL AIR SYSTEMS COMMAND, WASHINGTON, D.C. 20361, ATTENTION: AIR-51012.

## 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.

11 REVISED AND REDRAWN

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|---|---|---|
| P.A. NAVY - AS<br>Other Cust            | TITLE<br>TIRE, PNEUMATIC, AIRCRAFT, 24 X 7.7, TYPE VII (NAVY) | MILITARY STANDARD<br><b>MS26558(AS)</b> |
| PROCUREMENT SPECIFICATION<br>MIL-T-5041 | SUPERSEDES  | SHEET 1 OF 1                            |

DD FORM 672-1 (Limited coordination)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PROJECT NO 2620-N203

PLATE NO. 23071

This is a Navy Standard, approved by NAVAL AIR SYSTEMS COMMAND, Department of the Navy and is to be used by all other military services and employed in a standard where suitable.

APPROVED 23 OCT 1958 REVISED B 25 JAN 1962