U.S. Department
of Transportation
Federal Aviation Administration

Engine and Propeller Directorate

New York Aircraft Certification Office
1600 Stewart Avenue
4th Floor Suite 410
Westbury, NY 11590
(516) 228-7300, Fax: (516) 794-5531

DEC 05 2014

Mr. Richard J Mauk
Manager, Tire Engineering
Specialty Tires of America, Inc.
1600 Washington Street
Indiana, Pennsylvania 15701-2844

Subject: Technical Standard Order Authorization (TSOA) Application

Dear Mr. Mauk:

This is in reply to your letter dated October 27, 2014 requesting Technical Standard Order (TSO) authorization for your 8.50-6 4 PR Aero Classic Tube Type tire P/N 31328. We accept your statement certifying that your article meets the requirements of TSO-C62e and that you meet the requirements of Title 14 Code of Federal Regulations part 21 subpart O. It is recommended that inner tubes used with the subject P/N tire comply with SAE AS50141B. Effective this date, we authorize you to identify the following 15.50-20 20PR Aero Classic tires P/N 31328 with the marking requirements defined in 14 CFR §21.616(d) and in TSO-C62e.

Part Number:	**Description:**
31328	8.50-6 4 PR Aero Classic

We consider your quality system, which complies with the requirements of 14 CFR §21.607 as defined in your quality control manual revision 35, dated March 30 2011, has been found satisfactory for production of this article at your 1600 Washington Street, Indiana, Pennsylvania 15701-2844 facility.

This TSO authorization, issued under 14 CFR §21.611, is effective until surrendered, withdrawn or otherwise terminated under the provisions of 14 CFR §21.613. With notice, we may withdraw this TSO authorization if articles are not in compliance with the applicable TSO performance standards per 14 CFR §21.2.

You must obtain FAA approval prior to making any changes to the location of your manufacturing facilities pursuant to 14 CFR §21.609(b). You must notify the ACO and MIDO of name, address, or proposed ownership changes. Without further FAA approval, you are not allowed to mark articles after company's name, address, or ownership changes.

Per 14 CFR §21.614, a holder of a TSOA may not transfer it. If you wish to transfer it, you must request a transfer from the FAA.

Any design change(s) to this TSO article must be forwarded to this office as outlined in 14 CFR § 21.619. You should notify us with submittal of minor design changes at intervals not to exceed six months. Also, as recipient of this authorization, you are required to report any failure, malfunction, or defect relating to this articles produced under this authorization in accordance with the provisions of 14 CFR §21.3.

Furnish a copy of the data required by the TSO to the original owner/installer of each article or multiple articles if furnished to one source (for example, operator, type certificate holder, repair station). Please note that technical data the FAA retains may be subject to Freedom of Information Act (FOIA) requests. This office will notify you of any request(s) pertaining to your data and give you the opportunity to protect the data from public disclosure.

If you have any questions regarding this authorization, contact Mr. Leung Lee at 516-228-7309.

Sincerely,

for Gaetano Sciortino
Manager, New York
Aircraft Certification Office

cc: AIR-110
ANE-MIDO-44

STATEMENT OF CONFORMANCE
TSO-C62e

REFERENCE: Manufacturer's Application for TSO Authorization
Date: 10/27/14

The undersigned hereby certifies that the following described tire has been tested and meets the performance standards of Technical Standard Order TSO-C62e. In addition, all other known provisions of "Federal Aviation Regulations, Part 21 - Subpart 0 - Technical Standard Order Authorizations" have been met.

The technical data required by the TSO is also shown below.

Authorization to use TSO identification on this article is requested.

Technical Data - Reference Manufacturer's Part No. 31328

Size: 8.50-6 Design: Aero Classic PR: 4

Description: Type III Speed Rating: 120 mph

Load Ratings: Unloaded 22 psi Maximum Load: 1600 lbs

Loaded 23 psi

Inflated Outside Dia: 21.90" Tire Width: 8.62" Mold Skid Depth: .16"

Shoulder Diameter: 18.78" Shoulder Width: 6.60"

Static Unbalance (oz. in.): 5.0 Tire Weight: 8.90 lbs.

Rim Designation: Ledge Dia. 6.0" Flange Dia. 7.5" W. Bet. Fl. 6.00"

Loaded Radius: Nominal 8.40" Tolerance +/- .25" Actual 8.32"

Dynamic Tests (as required) - Tire, Reference Serial Number CYA4K54014, was tested dynamically in accordance with the following schedule to provide for establishing evidence of satisfactory performance for low-speed application.

1. Low-Speed Test Requirement:

   Tested in accordance with paragraph 5.b, Alternative Qualification Procedures (Appendix 1) of FAA Technical Standard Order for Aircraft tires 9/29/06 as applicable to TSO-C62e at 1600 lb. tire load and corresponding energies. The calculation for the kinetic energy of the flywheel has been performed in accordance with paragraph 5.b(4) and is available for inspection.

1.1 Summary of Test Cycles:

				Speed Range Land	Speed Range Unland
100 Landings at	153,938 ft.lb.,	59.1% KE	Required	73	53 MPH
100 Landings at	126,998 ft.lb.,	48.8% KE	Required	120	111 MPH

Reference

Test Date: 10/09/14 Dynamic Test Tire No. 14-10-01
Mold Dwg. No. A-6239
Stamping No. S-5348

STATEMENT OF CONFORMANCE
REQUIRED TSO-C62e TESTS

TSO Ref.

Appendix 1 – 4.c Overpressure

4 x Rated Inflation Pressure 23 = 92 PSI For at least 3 seconds.

Date Performed: 10/09/14

Appendix 1 – 4.a Temperature

A representative tire was exposed to temperature extremes of -40°F and +160°F for a period of not less than 24 hours at each extreme. The wheel/bead area of the same tire was exposed to a temperature of not less than 300°F for at least 1 hour. This tire was then tested in accordance with paragraph 5.b Appendix 1. Records for these tests are available for inspection.

Appendix 1 – 5.a (10) Slippage

Tire/wheel slippage checked after 5 dynamometer cycles.

Result: None Date Performed: 10/09/14

Appendix 1 – 5.a (9) Leakage

The tire was adjusted to the initial pressure after a 12 hour minimum stabilization period. This inflation retention test was conducted prior to wheel testing.

Initial Pressure: 22.0 PSI Ambient Temperature: 70° F

24 Hr. Pressure: 21.0 PSI Ambient Temperature: 70° F

Percent Loss: 4.5% (5% max.)

The conditions and tests for TSO approval of this article are minimum performance standards. Those installing this article, on or within a specific type or class of aircraft, must determine that the aircraft operates under conditions within the TSO standards. TSO articles must have separate approval for installation in an aircraft. The article may be installed only according to 14 CFR part 43 or the applicable airworthiness requirements.

Signed: _____

Richard J. Mauk
Manager, Tire Engineering

Test Report: 14-10-01

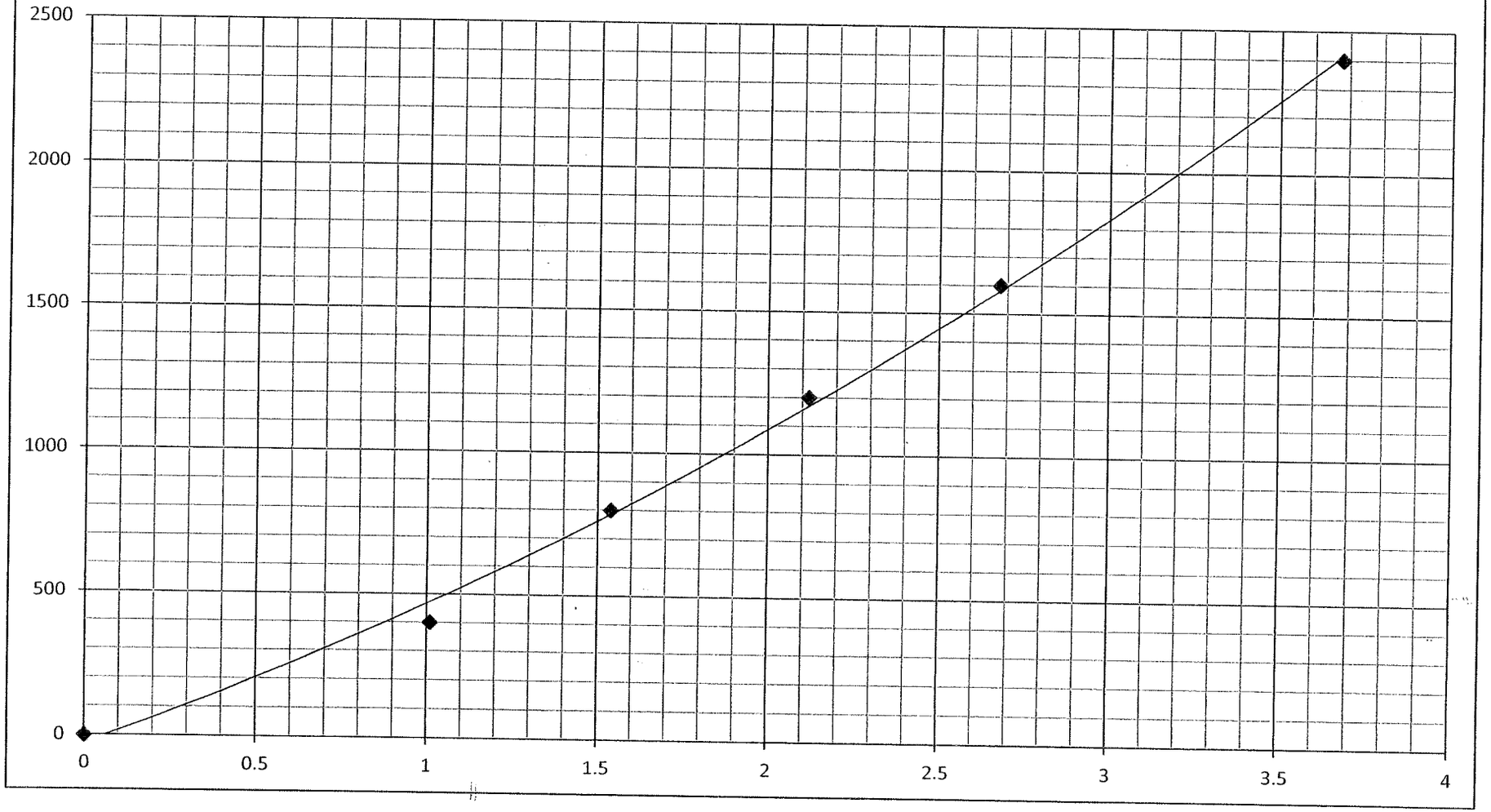
Analysis No: 40-01

Rated Load: 1600 lbs @ 23 psi

Date: 10/24/2014

AIRCRAFT TIRE DEFLECTION 8.50-6 4 PR AERO CLASSIC 31328

Load (lbs) vs Flat Plate Deflection (in)



Control Number 570902701-2014-0001