SOUTHERN STAR AVIONICS

To: Southern Star RVSM Dealers

From: Thomas M. Greer ,Technical Director

Date: August 19, 2004

Re: Skin Map Training Test

As you know the implementation of the RVSM Standard for turbine aircraft operating between FL 280 and FL 410 has greatly increased the accuracy requirements for the aircrafts air data systems and made accurate calibration of the aircraft static systems necessary.

Close evaluation of the aircrafts skin in and adjacent to the static ports is imperative to assure repeatable accuracy of the static sensing ports that allows aircraft to be certified under this group certification.

Care should be taken to examine the entire region forward of the static ports. The general rule is if it looks like it can cause a problem then it probably will. The attitude of "That will be OK" is not an option when evaluating the skin of an RVSM aircraft.

If you have questions regarding any aircraft, please contact Star Aviation at 251.650.0600 and ask for advice.

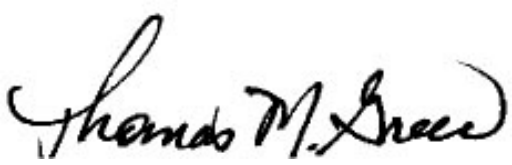
Please read the Skin Map Procedure, and the Instructions for Continued Airworthiness. View the Power Point Presentation and complete and return the test to:

Thomas M. Greer
2495-A Michigan Avenue
Mobile AL 36615

Phone: 251.433.9980 Fax: 251.433.9982
admin@avionics.net

Your training certificate will be forwarded to you within two weeks.

Sincerely,



Thomas M. Greer
Director, Technical Service
Southern Star Avionics

RVSM Skin Waviness Test

1) The Skin Waviness Testing Procedure serves what purpose:

    a. To add additional man hours to the installation time for RVSM
    b. To define the aircraft skin acceptance criteria for RVSM Qualification of aircraft to be included in the groups RVSM Certification.
    c. To be sure the paint around the static ports is smooth.
    d. To inspect the static ports for blockage by foreign materials.

2) What is the overall length of the leading bar (Part# KSR TOL 723):

    a. 12 inches
    b. 22 inches
    c. 13 inches
    d. 16 inches

3) What operations must be done prior to Skin Mapping the aircraft (circle all that apply):

    a. Airplane must be washed and waxed.
    b. Paint must be removed around static posts approximately 1.25 inch radius (e-550-1500).
    c. Reference grid established.
    d. Static ports inspected for condition and proper fasteners.
    e. Inspect area 6 inches aft, 24 inches forward, and 12 inches above and below static ports for cleanliness and evidence of damage.
    f. All old instruments must be removed from the system to assure accurate testing.

4) What is the purpose of the reference grids?

a. It is established to determine the location of each point at which skin waviness measurements will be taken.
b. To establish a layout for visual inspection.
c. To display to FAA Inspectors that the aircraft is RVSM compliant.

5) The leveling bar has (2) feet one end and (1) foot on the other. When oriented properly which end is positioned forward on the reference grid?

a. End with (1) foot
b. End with (2) feet
c. Does not matter

6) When doing the zero set on the leveling bar and gauge, what is the allowable tolerance for level accuracy?

a. + / - .002
b. + / - .020
c. + / - .001
d. + / - .100

7) To assure proper date collection polarity the digital depth gauge must be set to display “rev” in the digital window.

a. True
b. False

8) Slope calculations are the change relationship from one measurement point to the one next on the given grid row. What chapter and paragraph in the skin waviness procedure is this calculation information found?

a. 3.1
b. 3.3
c. 5.4
d. none of the above

9) How many test points are on the skin LAP test?

a. 5
b. 14
c. 12
d. 13

10) Where is the depth gauge zeroed for the skin LAP measurement?

    a. On a flat table
    b. On the top of the wing outboard of the deice boot
    c. On the skin just above the skin lap
    d. Any of the above will do

11) Where is the grid row tolerance chart found?

    a. In the skin waviness procedure
    b. In the Instructions for Continued Airworthiness
    c. Star drawing # D-11-Y29-0344
    d. In the airframe structural manual

12) If you consider nothing else, and the aircraft conforms to the tolerance chart, is this always sufficient data to qualify the aircraft for the group STC?

    a. True
    b. False

13) What additional testing must be done for the Citation 560 and the 550-S2 ?

    a. Static source button height must be checked
    b. Grid rows are extended to 15 test points
    c. A and b above
    d. There is no difference in the test procedure

14) If paint stripes are in the critical static region, what must be done to assure they will have no effect on the system accuracy?

    a. A good visual inspection is all that is necessary to assure that stripes are not flaking
    b. In an area 3 foot forward and one foot above the static ports, any transition in the paint scheme must be smooth
    c. They must be removed or relocated
    d. Paint stripes generally have no effect on static source errors so no action needs to be taken

15) The best way to remove the paint from around the static ports on the Citation 550/500 aircraft is to use a sharp putty knife and coarse sandpaper

a. True
b. False

Company Information

Name of company: _____

Address: _____

Telephone: (____) _____ Fax: (____) _____

Technician Information

Name (Please Print): _____

Signature: _____ Date: _____

SCORE: _____