

**FIELD SERVICE BULLETIN NO. 22**  
**15 NOVEMBER 1964**

**MANDATORY**

**TO: ALL NAVION DISTRIBUTORS, DEALERS AND OWNERS**

**SUBJECT: INSPECTION AND/OR REPAIR OF CRACKS IN FUSELAGE**  
**FRAME 143-31004-16 AT STATION 294.1**

**EFFECTIVITY: ALL NAVION AIRCRAFT (MANDATORY)**

**ACCOMPLISH: ON OR BEFORE 15 JANUARY 1965**

1. Inspection of some Navion aircraft has revealed that cracks may exist in fuselage frame 143-31004-16 at Station 294.1 inboard from the top stringer cutouts at W. L. 21.00. Immediate inspection of the area must be made by removing the inspection plate on the left side of the fuselage beneath the horizontal stabilizer, looking forward to view the aft side of frame at points in question. If no crack is visible, perform a thorough inspection of the frame at each 100 hour inspection thereafter.
2. If a crack is visible at either side of the frame, determine if it has extended beyond the critical rivet (see Figure 1) if so, it is necessary to apply paragraph 3, otherwise proceed as follows immediately.
  - a. Remove stabilizer for access to bulkhead.
  - b. When crack extends to the critical rivet, remove the rivet and relocate nearby or if cracks does not extend as far as the critical rivet, stop-drill end of crack.
  - c. Install gussett patch of .125 24 ST Alclad to R and L outer surfaces of fuselage skin by removing existing rivets in frame and stringers and installing patch. (see Figure 2)
  - d. Reinstall stabilizer.
  - e. Check cracked area at each 100 hour inspection to determine if crack has extended beyond critical rivet. If so it will be necessary to apply paragraph 3.
3. If crack on either side of frame has extended beyond the critical rivet, install new frame