



May 4, 2005

Dear Maintenance Technician:

The Fairbanks Flight Standards District Office (FSDO) has, on occasion, found problems with aircraft that appear to warrant dissemination of the findings to the general public, due in part to the impact the information may have on safety.

Maintenance inspectors within our office have recently identified a trend that we feel warrants dissemination to the maintenance personnel within our district, while we continue to elevate our concerns and findings at other levels as well.

Currently, we have found three instances of turnbuckles on small Piper aircraft that have had cracks originating around the "V" notch at the location where a safety clip may be installed. The cracks run lengthwise on the buckle from the "V." The cracks are about 5/8 to 3/4 of an inch long. The cracks have all been on NAS-649 series turnbuckles. The latest turnbuckle has a manufacturer stamp date on it of 1973. A photograph of the typical crack is attached for your convenience.

As additional information, the NAS series turnbuckle has been superseded by the MS21251M series turnbuckle. A copy of the Data Specification Sheet MS21251M has been included. Of special note, look at the reference in the specification (item seven). It specifically states, "A turnbuckle with a manufacturing date of 1978 or older shall not be used for replacement repairs since stress relieving was not required prior to this date." This may be part of the problem with the older turnbuckles and associated cracking from the "V" notch cutouts for the safety clips.

If you have any questions regarding this matter, please contact our office:

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6450 Airport Way, Suite 2  
Fairbanks, Alaska 99709  
Telephone: (907) 474-0276, Fax: (907) 479-9650.

Sincerely,  
James H. Tupper  
Airworthiness Unit Supervisor