

February 10, 1987

Mr. Jeffery L. Kennedy
Air Safety Investigator
National Transportation Safety Board
Miami Field Office
8405 N.W. 53rd St.
Suite B-103
Miami, Florida 33166

Dear Mr. Kennedy:

I have received the box of cables and the report labeled (Metallurgist Factual Report). Our recent phone conversations have centered around the movement of the aileron center wing cable (P/N 109409-2-8) and the distance it moves back and forth. Let me give you a few known facts and then I will deal with speculation.

I have removed the other two aileron cables from aircraft N604SS. I will deal with the length of the cables that make up the left side. The first cable, from the bottom of the yoke to the center of the forward cabin P/N 109409-2-7 (Aileron Fuselage Front), in accordance with Grumman G-73 Service Manual is 10' 8" long. The same cable taken from N604SS measured 10' 5-3/4" long. The second cable P/N 109409-2-8 (Aileron Center Wing), in accordance with the Grumman Manual should measure 12' 3" long. The same cable taken from N604SS measured 11' 5/8" long. This is the broken or burnt cable and is in 5 parts as follows:

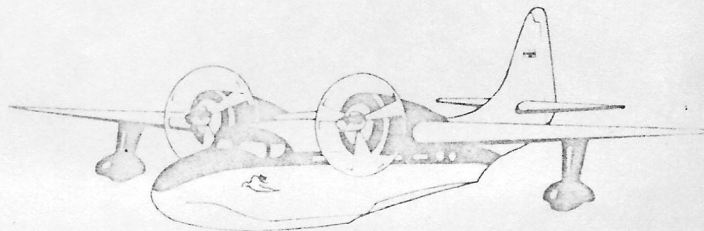
- (1) 7' 3" - Right side of burn above fire bottles to forward cabin.
- (2) 2' 8-1/8" - Extreme left end from center section to above left wheel well in wing.
- (3) 10 1/4" - Small piece you cut from piece #1 to send to the lab.
- (4) 1-3/4" - Small piece in plastic bag attached to report. I believe this was cut from piece #3.
- (5) 1 1/2" - Fused to battery wire.

The third cable P/N 109409-2-9 (Aileron Left Wing), according to the Grumman Manual should measure 21' 2-3/8" long. The cable from N604SS measured 21' 2-1/8" long.

If you take the time to figure this all out, you will come to the conclusion that overall 1' 2-3/8" of cable is missing from the required 44' 1-3/8".

It is a fact that when the cables were installed in N604SS the actual cables measured as follows:

Aileron Fuselage Front - 10' 5-3/4"
Aileron Center Wing - 13' 5-3/8"
Aileron Left Wing - 21' 2-1/8"



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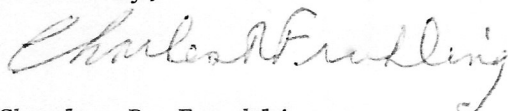
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instead of the measurements called for in the Grumman Manual, but still totaling 44' 1-3/8". Therefore the Aileron Fuselage Front and the Aileron Left Wing cables taken from N604SS are intact as installed and the missing 1' 2-3/8" is missing from the Aileron Center Cable P/N 109409-2-8.

The missing portion of cable didn't just burn up. I do not know at this point where it is. I have been out to the aircraft several times and have searched for it and cannot find it.

Further, the cable left outboard piece 2' 8-18" or 32-1/8" long does not bring the fused end even close to where the battery cable was. The center of the turnbuckle for this piece is located at approximate wing Station 60. With the piece of cable 32-1/8" long, this brings the burnt end to Station 28 where the cable goes through the last rib in the fuselage out to the wing.

Sincerely,



Charles R. Freehling
Director of Maintenance

CRF/esr