ML.56.Modifications versus Airframe Integrity By Walt Schrecker

I have flown the EC-135/RC-135M, V, U, and V/W, and the KC-135A and Q, taking the first RC-135W to RAF Mildenhall for its operational debut. I also took it to Eglin for its COLD weather hangar tests, leaving OFFUTT where it was minus 15 degrees for the Florida base's 80-degree temperature ... well, the Systems Command Cold WX Hangar was there!

What's so remarkable, truly unrivaled in aviation development, are the longevity and expanse of varied mission capabilities of these aircraft. I recall seeing a stripped-down tail number 135 on a visit to E-Systems and then -134 on a visit to Offutt, both over 40 years since I had flown them. And we thought these airframes were high time and old back then! [They were. - ed]

What's always concerned me from my days and experience with these modifications is the level of peril the aircrews were in all along the way, by virtue of the age and structural integrity of the control systems and the airframes themselves. Fuselage modifications with added stressors from antennae, all increasing the basic weight and aerodynamic stress inflight.

I recall 4135 having pitch control problems in the A/R envelope, with multiple write-ups from high time pilots including me. At length, the culprit was found to be a fraying of the wire to the elevator controls. The wire was sawing through a fairing that was part of the original C-135B MAC configuration.

Then during a rudder preflight of the manual rudder with the wind making the task a two-pilot effort: TWANG the rudder pedal banged to the bottom. The rudder cable had severed and broke. Bag Drag Time!

Boeing built them well ... but then the modifications ...

Murphy's Law concerning the innate perversity of inanimate objects has come into playthe fourth law of thermodynamics" which states: "If anything can go wrong, it will."

And sadly, in the case of RC history, IT HAS!