On 6 Apr 1993 14:06:57 -0400, prb@access.digex.com (Pat) said:

Pat> In article <SHAFER.93Apr6094402@rigel.dfrf.nasa.gov>

Pat> shafer@rigel.dfrf.nasa.gov (Mary Shafer) writes:

>successful we were. (Mind you, the Avro Arrow and the X-15 were both

>fly-by-wire aircraft much earlier, but analog.)

Pat> Gee, I thought the X-15 was Cable controlled. Didn't one of them

Pat> have a total electrical failure in flight? Was there machanical

Pat> backup systems?

All reaction-controlled aircraft are fly-by-wire, at least the RCS part

is. On the X-15 the aerodynamic control surfaces (elevator, rudder, etc)

were conventionally controlled (pushrods and cables) but the RCS jets

were fly-by-wire.

The NASA habit of acquiring second-hand military aircraft and using them for testbeds can make things kind of confusing. On the other hand, all those second-hand Navy planes give our test pilots a chance to fold the wings--something most pilots at Edwards Air Force Base lcan't do.

Pat> What do you mean? Overstress the wings, and they fail at teh Pat> joints?

Navy aircraft have folding or sweeping wings, in order to save space on the hangar deck. The F-14 wings sweep, all the rest fold the wingtips up at a joint.

Air Force planes don't have folding wings, since the Air Force has lots of room.

Mary Shafer DoD #0362 KotFR NASA Dryden Flight Research Facility, Edwards, CA shafer@rigel.dfrf.nasa.gov Of course I don't speak for NASA

"A MiG at your six is better than no MiG at all." \	Jnknown US fighter pilot