

# Roger Christensen

I was born in 1937 in DeWitt, Iowa. Graduated from Iowa State University in 1960 with a degree in Aeronautical Engineering. Joined the California Army National guard in 1960 and was hired into Lockheed California Co. in 1961. Went to the Skunk Works (Advanced Development Projects) in 1964 where I worked for Fred White.

Fred White was responsible for developing, printing and distributing the A-12 Utility Flight Manual and Pilot's Abbreviated Checklist. When Fred worked at the area, he attended pre and post flight briefings, worked on the performance information and other Flight Manual items, and supervised his workers. My job was to help establish the A-12 Utility Flight Manual Performance Appendix.

Before the deployment, the Flight Manuals group had to get climb, cruise at Mach 3.10, and descent performance into the Flight Manual. The operational pilots flew many flights over the U. S. cruising at Mach 3.10 to obtain the necessary information. Two cameras were positioned behind and over the each shoulder of the pilot to get the required information from the cockpit gauges.

After the flights, the film was developed, then I and others read the film at the area for further processing. The operational pilots provided much detail concerning the performance and operation of the aircraft during each post flight debriefing. This continued until there was enough information to produce the performance and include the results in the Flight Manual.

Some items of note that I remember are:

Mel Vojvodich getting the benefit of a 90 knot tailwind at cruise altitude going westbound from the Mississippi River to the start of descent into the area.

Jack Layton getting to approximately 525 KEAS during the transonic maneuver (I think he was distracted when talking to the FAA on the radio).

Clear air turbulence at cruising altitude.

After deployment, the performance was found lacking due to atmospheric conditions which differed from the normal standard atmosphere. A tropic atmosphere was established and performance was recalculated and results incorporated into the Flight Manual.

By this time the thrust, drag, and fuel flow information was finalized and a computer program was also finalized so that performance could be calculated for any cruise Mach number. The results were incorporated into the Flight Manual and the mission planners could depend on the revised performance.

Cliff Quaintance worked for Fred White at the area in the same

capacity as I.

Henry Oda worked at the area and also helped. (I don't remember who he reported to at that time.) Henry also went on the deployment.

Before working on the A-12, I worked on various F-104 models and the P-3A. While working on the A-12, I also did some work on the YF-12A. After the A-12 performance was finalized, I worked on the B-52H/D-21B, U-2R, L-1011 Tristar, and then replaced Fred White when he retired in 1977.

The Flight Manuals group continued working on the SR-71 and U-2R. Have Blue, Senior Prom, F-117A, and the U-2S programs followed.

Went back to the "white world" in 1969 until Fred retired in 1977. Remained in ADP until retirement. I retired in 1994.