

FLIGHT TEST OF CONROY CL-44-0

'GUPPY'

PART ONE

Attention all former cockpit crew members of this aircraft in any seat, and anyone that has ridden aboard her in any capacity, "You almost never had a chance to do so" But more on that later in part two.

I guess we all fall in love with any anti gravity machine that safely gets us back to earth without killing us. It's called the Stockholm syndrome. Some aircraft are dearer to us than others, but we usually have fond memories of most that we have flown, and as in this case, some not so fond ones.

Flight testing an aircraft, for those of you that have not done so, is completely the opposite of standard operating procedures, such as we follow in normal airline operations. You basically go looking for trouble in every flight, and sometimes you find it.

Do any of you remember Counter-Rotating Tractor? How about Ice Protection Master, 113 degree Miter Gear Box, Flying Tabs, Meto- Power, Torque Tubes, Third Oil Line and finally, BMEP (Brake Mean Effective Pressure)? (Just checking to see if you piston guys are paying attention).

Flight testing of the CL-44-0 took place out of Santa Barbara, and Edwards Air Force Base in California. Due to the major modification to the fuselage and the close proximity of propellers #2 and #3 to it, the already established numbers from Canadair had to be verified or re-established. For example, three engines operating climb-out performance. And how about two engine climb-out performance? What are the new numbers with all that added drag? On both occasions we flew to California's Salton Sea, which is 227 feet below sea level, located in the extreme South Central part of the State. With water ballast tanks on board, to simulate various weights, we flew the aircraft to about 100 feet above the water, and shut down and feathered engines #3 & #4. No simulation here. Recording equipment was started; speeds adjusted, and climb power set. Of course, the remaining two

operating engines would never cough at this time, right? (When you are a test pilot, you are bullet-proof). That is how we collected all the new data, as we climbed through sea level. Velocity Minimum Control Ground (VMCG) was located at all weights by shutting down the critical engine during the take-off roll, and limiting the aircraft travel within 35 feet of the centerline of the runway. Velocity Minimum Control Air (VMCA) of course was established in a similar manner, in flight, using a slight degree of opposite bank.

The cast of characters in this story were: Jack Conroy, of world fame as the Guppy designer/builder and record-holding pilot with the first transcontinental round trip in the same day. On May 21, 1955, Lt. John M. Conroy piloted an F-86 Sabrejet across the U.S. (Los Angeles-New York) and back—5,085 mi—in 11 hr., 33 min., 27 sec. Captain Herman “Fish” Salmon, Lockheed test pilot who became famous with his test flights of the P-38, Constellation, and the testing to replace the engine mounts of the Electra to prevent it from shedding its wings. Also, he was one of the first to “shoot himself down” when testing an F-104A, when gattling gun gases failed to purge properly out of the gun bay and on the next burst the bay exploded and debris went into the engine inlet taking out the engine. This model had a downward ejection seat, which is not good but he got out unhurt. Captain Jim Seymour, a very high time and incredibly experienced Airline Pilot and CL-44 check pilot on loan to Conroy Aircraft from Flying Tigers. Jim flew in the left and the right seats depending on what was going on. Yours truly Captain Jeff Seideman furloughed from Flying Tigers at the time when the company was unloading their entire fleet of Connies, CL-44s and a few 707s and replacing them with DC-8-63s. I returned to Flying Tigers a few months after delivering the Guppy to the U.K... I was the only Second Officer/Flight Engineer to be on every flight, from the first flight until the aircraft was delivered to Trans Meridian Air Cargo in Stanstead, England in the summer of 1970. Captain Joe Carlisle, who did everything except act as an operating cockpit crew member. He was on board most test flights, and was essential to the entire flight test program and social gatherings when we were not flying. I could not imagine flight testing the “Guppy” without him. Lastly, Captain Luis (Louie) Salazar, who was not as much involved in the initial flight test, although he was there, flying the support aircraft, and being Jack Conroy’s right hand or “gopher” man. His

role came into play during certification, and after completing FAA Part 121 CL-44 training at Flying Tigers (he attended the classes at the same time as the Transmeridian Pilots), he became the first co-pilot to ever-fly the CL-44-0 in revenue service. He served as a pilot with Transmeridian from delivery of the Guppy, flying many hours on it until hired several years later by World Airways, where he retired not long ago as an MD-11 Captain. He now lives in Florida. Not employed by Conroy Aircraft was an FAA pilot, who flew in the left seat of some test flights in an official FAA capacity, particularly towards the end of the program. To my knowledge, Joe Carlisle and myself are the only surviving Conroy Flight test crew members.

Jim Seymour, the man to whom I owe the last 37 years of my life, was tragically killed while in his early fifties, in his home-built Starduster open cockpit airplane. He was flying with his son where they lived in Northern California one clear day and on landing, the Starduster inverted and caught fire before he could get out of the upside down cockpit. His son, Jimmy got out ok and received some burns while attempting to save his dad. Jim was no stranger to "tail-draggers"; he flew lots of them, including DC-2s & DC-3s.

Fish Salmon was also killed tragically in an aircraft accident some years later, while ferrying a Lockheed Connie out of an airport in Ohio. Coincidentally, he too was flying with his son, Scooter, and his son survived the takeoff crash.

In conclusion of Part One of Flight Test, Have you ever wondered what lies beyond the limits of Aircraft speeds, such as VNE (Velocity Never Exceed), or VMO (Velocity Max Operating Speed) or, MMO (Velocity Max Operating Mach Speed)? Or have you ever been cooking along in a high speed decent at the airspeed or mach limit barber poll/clacker, and hit some turbulence that brings you one needle width beyond barber poll? How about two needle widths or more before you pulled the nose up and got the power off and reduced the speed. The answer is actually not published! However, in the case of this one of a kind flying contraption there was mach buffet and it happened at .70 mach. FAA certification requires finding the not so pleasant happening, or others, and then backing off 10 percent. That's where you put the barber poll limit, in this case .63 mach. That's for people like myself that will admit to, say—exceeding mach limit on a few occasions, in 33,000 hours by 1 & ½ needle widths, due to turbulence of course! Flight

control reversals were also a problem. You know, when you pull back and the nose goes down, push forward and the nose comes up. Fortunately Someone invented a band aid for this problem called vortex generators, however, the question remains, Are they A/C or D/C??

Captain Jeff Seideman,
U.S.A.F., Pan American Airways, Lockheed Aircraft, Flying Tigers, Conroy
Aircraft, FedEx, Retired.
jeffseideman@msn.com