

~~SECRET~~
Apr 69

FROM: DCOSE

SUBJECT: Operations Newsletter

TO: 553 Recon Wg Crewmembers

2 April 69

1. About 3 months ago one of our aircraft developed symptoms completely uncommon in the history of four engine flight. All four props went on R&R at the same time. The crew aboard conducted a few non-standard procedures, but were able to recall all props to duty in ample time to deliver aircraft and crew safely at Da Nang RVN. Before the flight test program, the aircraft in question was named the "Da Nang Glider" and underwent an extensive maintenance and ground test checkup. Although prop and electrical super-sleuths were shuttled between the U.S., Korat, and Da Nang, at regular intervals, nothing was found to positively nail the supervisor who issued the 4 simultaneous R&R's. These super-sleuths included the Lockheed Senior Research Engineer who originally designed the Connie prop system way back in 1946. So in order to find the true villain, all electrical and propeller components that could possibly have caused the incident and all those who could have contributed to the incident were given an immediate discharge and reduced in grade to scrap. Components replaced were:

- a. Engines 3 and 4
- b. Prop feathering pumps, 3 and 4
- c. Prop feathering pump motors, 3 and 4
- d. Prop governors, 3 and 4
- e. Propellers, 3 and 4
- f. Torque switches, 3 and 4
- g. Spark plugs, engines 1 and 2
- h. Prop reversing coordination relay panels 3 and 4 (Overhauled at depot and reinstalled).
- i. Connector No. 1, flight engineer's lower panel (Plug and receptacle).
- j. Prop synchronizing box.
- k. Bus sectionalizing relays, all (2)
- l. Prop feathering relays, all (4)
- m. Time delay relays, all (4)
- n. Prop feathering switches, 1, 3 and 4

2. Even after discharge of these bad guys, volunteer glider crewmembers were not requested until the following steps were taken:

a. The auto feathering system was temporarily by-passed and a panel installed to indicate any unknown bad guys attempting to activate the auto feathering system.

b. Two "no-can-feather" switches were installed for the feathering systems on props #2 and #3.

3. After completion of all ground maintenance a volunteer glider crew was assembled and dispatched to Da Nang. Several high speed taxi runs were accomplished before the initial T.O. (a confidence building maneuver). Then the flight test program was initiated as follows:

a. 1st Flight, 2 hours over Da Nang at 16000 ft. with all safety devices operating. Result: No-have-problem.

b. 2nd Flight, 4 hours, returned glider to Korat and flew in local area at 16000 and 20000, all safety devices operating. Result: No-have-problem.

c. 3rd Flight, 4 hours over Korat, at 16000 ft., auto feathering system back in action but not turned on (never again by passed). The two no-can-feather switches shut off alternately during flight at altitude. Result: No-have-problem.

d. 4th Flight, 4 hours, at 16000 ft., the two no-can-feather switches shut off alternately for 30 minutes each and then both turned off for the rest of the flight. Result: No-have-problem.

e. 5th Flight, 4 hours, made take off and landings with first one no-can-feather switch off and then the other. Next take off with both switches off and climbed to 16000 ft. and armed auto feather system for 30 minutes (no-can-feather switches on). At cruise altitude with auto feather on and only #2 prop no-can-feather switch on, #4 engine was intentionally failed and feathered automatically in accordance with expectations. Then the RPM on the 3 remaining engines was reduced to the low pitch stops. Result: No-have-problem, test crew relaxed and cracked jokes. Glider referred to as faker, losing unique status.

f. 6th Flight, 4 hours, 16000 ft. with all back-end gear installed and operating no-can-feather switches, one alternately off at a time and then both off for over an hour. A second take off was made with both no-can-feather switches off and appropriate back end gear on. Result: Crew sleepy and requested GCI to assist in traffic surveillance.

g. 7th Flight, 4 hours, 1st take off #2 no-can-feather switch on, #3 no-can-feather switch physically removed from the system, auto feathering off, climbed to 16000 ft. and at this altitude armed auto feathering and moved all props to full decrease. Nothing happened, so had to juggle throttles to get prop to feather.

2nd take off, #2 no-can-feather switch on, #3 no-can-feather switch long gone, auto feather armed.

3rd take off, #2 no-can-feather switch off, #3 still gone, auto feather on. Then landed and hooked up #3 no-can-feather switch and disconnected #2 no-can-feather switch and repeated all test items above using the #3 no-can-feather switch VS #2. Result pilot getting better on landings, all crewmembers muttered about which no-can-feather switch now.

h. 8th Flight, throw away all no-can-feather switches and protective devices and flew aircraft for 4 hours. Used all systems throughout. Feathered all props manually (one at a time!), complete total flight test time 30 hours.

i. The Da Nang glider, now completely removed from glider status, was worn out at this point and mother maintenance stepped in and said we must rest, Q.C., and wipe her down.

j. This ex-famous aircraft has probably more new parts than any other "R" model in the fleet. Completely operational now, the flight test crew accompanied by crew 33 made the first return to orbit flight on 16 September and as in the test program - Result: No-have-problem.

4. The flight test crew now presents this airframe back to the fleet and Recce crews - completely stripped of her past fame.

Sincerely,

Flight Test Crew 007
Chief of 553 Wg Safety
Chief of 553 Wg Stan/Eval
553 Wg Quality Control/Flight Test Officer
553 Wg Stan/Eval FE
553 Wg Quality Control/Flight Test FE