

GRAMPAW PETTIBONE

An Orchid for NATS

One day last November a big Naval Air Transport Service R5D, on scheduled flight into Argentia, Newfoundland, was "in final" on GCA at an altitude of about 300 feet, when the plane commander discovered his rudders locked in a near neutral position. A quick check failed to reveal the trouble, and full strength on the rudder pedal yielded naught. Aileron and elevator controls were normal.

The NATS pilot elected to continue the approach rather than go back up into the overcast. A straight course was maintained by use of aileron control. The plane was lined up properly for the intended runway, which was clearly in sight, and the landing was completed without mishap. On the ground, the pilot kicked hard rudder. The action freed his rudder controls.

Thus a small cap from one of the fluorescent lights in the cockpit could have scored a blow against one of the world's outstanding aviation safety records. The cap apparently had jarred loose and fallen off during final approach, wedging itself between the deck and the elastic stop-nut on the rear of the vertical rudder pushrod, thereby locking the controls. With the episode long since aired throughout NATS, that gremlin won't appear again. Squadron engineers have seen to that.

The Naval Air Transport Service has just completed a full year of operation without a single passenger fatality. This includes both domestic and overseas operation. A glance at the figures below show how NATS has steadily improved its safety record despite the release of more than two-thirds of its experienced pilots to civilian life during the past two years.

PASSENGER FATALITIES PER 100,000,000 PASSENGER MILES FLOWN	
1943—25	1945—3.9
1944—8	1946—1.8
1947—0	



Grampaw Pettibone says:

Congratulations to the entire NATS organization on this wonderful record.

For those of you who like to roll the big figures around, here are a few more facts about NATS operations which sound like mighty purty music.

They have flown a total of 1,815,000,



000 (yes, that's the right number of zeros) passenger miles in Douglas Sky-masters, better known as the DC-4, and in Navy circles as the R5D, WITHOUT A SINGLE PASSENGER FATALITY.

The giant MARS flying boats have been operated on the vast over-water runs more than fifty-two million passenger miles without a single passenger fatality.

Now, hold on to your hats because here's one for the books!

The non-stop "Hotshot Flight," operated by NATS between Washington, D. C. and Moffett Field, California, six nights a week in both directions, completed every one of its scheduled flights in 1947 without a single cancellation.

Those in the know tell me that this record for dependability and reliability of service could not have been accomplished without the use of Ground Controlled Approach, and that NATS pilots practice GCA approaches on every landing, fair weather or foul, at fields where the necessary installations have been made.

I feel sure that this is one of the many reasons which have enabled NATS to move into the number one spot in the field of safety.

Again, CONGRATULATIONS, and keep up the good work.

Aerial Repair Man

During the take-off on a test flight the pilot of an R4D-3 noted that the port propeller only developed 2200 rpm in full low pitch, about 550 below normal. After throttling back to cruising settings and circling the field, he noted that the port propeller control was about 45 degrees further forward than the starboard control when the props were synchronized. At 800 feet just under a thin overcast, he decided to feather the port engine momentarily to see if this would free the prop governor which appeared to be sticking. At this time both engines were operating normally and the pilot was in the traffic circle just beyond the service runway.

After placing the port engine mixture control in the idle cut-off position, the pilot pressed the feathering button. Immediately thereafter while attempting to increase the manifold pressure and rpm on the starboard engine, the pilot noted that the rpm on the starboard engine was dropping rapidly. Since the propeller appeared to be feathering, he attempted to arrest this action by use of the starboard feathering button, but to no avail.

With the loss of power on both engines, the pilot attempted a dead stick landing on the nearest runway which was approximately cross wind. Gear and flaps were lowered but due to the loss of hydraulic pressure only half flaps were obtained. A steep "S" turn was made into the field resulting in excessive airspeed. The plane touched the runway about 4000 feet from the approach end and with no brake action available rolled another 2700 feet where it nosed up in a ravine beyond the runway.

The plane was carefully checked following the crash and no electrical short circuits were discovered. The plane's battery power was turned on and both feathering circuits were found to be operating normally. In view of the above the accident board is of the opinion that the pilot placed the port mixture control in idle cut-off position and then inadvertently pushed the starboard feathering button, thereby causing a complete loss of power from both engines.



Grampaw Pettibone says:

This is what I call a real Dilbert maneuver . . . and I'm not speaking of the accidental activation of the wrong feathering button. What I'm burnt up about is the pilot's decision, while on a test flight, to attempt to correct the mechanical difficulty by feathering a propeller at 800 feet rather than making a normal landing, and turning the plane back to the maintenance personnel for corrective action.

Take another look at the situation. Here's a fellow who's had trouble with his plane, but at the moment he's circling his home field with normal power on both engines. His altitude is 800 feet and he is just below the overcast. He's in no trouble at all if he simply uses plain ordinary horse-sense and lands the airplane, but not old Dilbert—he feels the urge to be an aerial repair man. This urge, plus improper feathering procedure, plus misjudging the subsequent emergency landing, add up to one mighty expensive airplane—completely wrecked. One less operating aircraft.

Attention TBM Pilots

The pilot of a TBM had completed four glide bombing runs in which his pull-outs appeared normal and during which he apparently experienced no unusual circumstances. He was experienced in this type of attack in the TBM and familiar with its operating restrictions.

On his fifth run part of the starboard wing and tail section left the plane at the pull-out altitude of approximately 2500 feet. The plane dove into the water out of control and all three occupants were killed.

The accident board is of the opinion that the pilot became too steep in his downwind approach and may have used elevator tab during the pull-out.

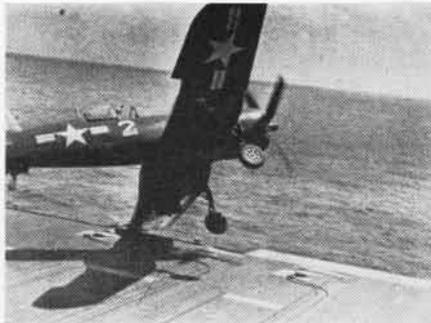
 **Grampaw Pettibone says:**
This is the FORTY-EIGHTH accident of this nature in the Avenger type aircraft in the past thirty months. In almost every case there were no survivors. Surely this should indicate the necessity for observing the operational limits on this plane. As every Naval Aviator knows the TBM was not designed as a dive-bomber. It was designed to be used as a torpedo and horizontal bomber. As a result the maximum permissible speeds and "G" forces are considerably less than those applicable to any other currently operated carrier aircraft.

The safe limits for the operation of this plane are explained in Technical Order 49-45, and in Flight Safety Bulletin 3-47. If you intend to do anything other than straight and level flight in the TBM, read these limitations. MEMORIZE THEM. Then subtract a few knots from the top limit and save a "G" or two for the wife and kids. DON'T BE NUMBER 49!

This Will Kill You

While starting an R5D at night, the clear signal for starting number two engine was given the pilots. Inadvertently the co-pilot reached too far and instead of energizing and meshing number two engine, he hit the switch for the number one engine. The result was nearly tragic, in that the man holding the fire bottle was standing almost directly in the propeller arc of the number one engine and narrowly escaped injury when the engine was meshed.

 **Grampaw Pettibone says:**
Sure the co-pilot made a mistake and the plane commander failed to check his error in reaching for the wrong switch. Both would have felt mighty bad had this lineman been killed. But, gee-whiz, fellows, don't take anything for granted. If you're the guy standing under one of the dead engines, it's your skull that's in danger of being split wide open should the pilot actuate the wrong switch. Play it safe—give all engines a wide berth during starting operations.



Slow Response on Wave-Off

The picture above shows that even old timers occasionally make serious mistakes when qualifying in new types. This F4U-4 was being flown by a pilot with 4,623 hours. He overshot the groove slightly and was not lined up with the deck. When the LSO gave him a wave off, he was slow in responding to the signal and the plane settled towards the deck in a nose high attitude. Full power was applied at very near the stalling speed, and torque caused the left wing to drop. The aircraft continued over the side of the ship and struck the water in a nose down inverted attitude.

Shoulder harness and safety belt were tight and functioned well and the pilot got clear of the wreckage, inflated his life jacket and was picked up a few minutes later by the plane guard destroyer.

Dear Grampaw Pettibone:

A man always hates to admit his errors, but you say confession is good for the soul, and what happened to me might help some other pilot avoid the same trouble, so here goes.

I took off one morning and was flying blind on the Atlanta range. I contacted the range station and requested permission to orient myself and make a let down; permission granted, I proceeded as directed. As I passed over the high cone I was directed to hold, and did. By the time I was cleared for final approach the weather was down below instrument minimums.

At that time I requested GCA. The request was granted. After passing over the low cone I switched to the GCA frequency and completed a successful GCA approach and landing. The complete let down took almost an hour and it was a relief to be on the deck, but that is where the catch came in. I relaxed too soon.

As I stepped out of the Link Trainer I slipped, fell and sprained my ankle. Result: four days flat on my back.

The lesson learned from this ironic accident is, no matter what you are flying, Link, Corsair, or transport, the hop

isn't over until the plane is tied down and the pilot is in the ready room. Don't dope off, flying is a full time job. /s/ 1st Lt., U.S.M.C.

P.S. I wonder if I am the only pilot injured in a Link Trainer crash.

 **Grampaw Pettibone says:**
I can't say for sure, but you're certainly the first "Link Trainer casualty" that I have heard of.

Serial Numbers on RUDM's

Numerous activities are submitting Aircraft Accident Reports stating that an RUDM is to be submitted, but are not specifying the serial number of the RUDM as called for on form NAVAER 339 (Rev 11-45). The serial number is necessary in order to correlate the two reports in the bureau. If submission of the RUDM will be delayed, the RUDM serial number should be pre-assigned.

\$75,000 Mistake

The skipper taxied out to take-off position in his F8F and checked his magnetos while the selector valve was on the auxiliary fuselage tank, assuring positive suction. Before manning the plane he had been informed that this tank had been almost completely emptied to reduce the load for field carrier landing practice.

After checking the mags, he failed to complete his check-off list and took off with the fuel selector valve on the nearly empty auxiliary tank. Just after becoming airborne, and with the wheels part way up, the engine stopped due to a loss of fuel suction. The C.O. made a belly landing and skidded approximately 1,000 feet to a stop. Unfortunately the auxiliary tank did not shear off on contact with the runway. Instead it burst into flames, and the aircraft was destroyed by fire. The pilot escaped with a sprained ankle received while jumping from the plane.

 **Grampaw Pettibone says:**
DILBERT! Now what are you doing in that Lieutenant Commander's disguise.

Well, my red-faced friend, if it will make you feel any better, I'll tell you one that was even worse than that, though perhaps not quite so costly. (This, by the way, is your reward for that very frank and honest accident statement.)

Some years ago a particular fighter squadron had a regular epidemic of wheels-up landings. One day as the 18-plane outfit approached the field for a landing, the skipper picked up his mike and let loose with quite a spiel on the subject of what was going to happen to the next fellow who forgot his wheels. He then checked with the tower for landing clearance, peeled off, and landed without lowering his own!

Use the check-off list every time.