

GRAMPAW PETTIBONE

Close Call

Here's Grampaw's "near accident" of the month and a great big orchid to the pilot for getting his plane and passengers back to base.

An R5D took off at 0900 on a routine NATS flight from Seattle to Kodiak, Alaska. The weather forecast indicated an "average" trip—two to three hours of instrument flying over the Alaskan Gulf with light ice and moderate turbulence while passing through the front.

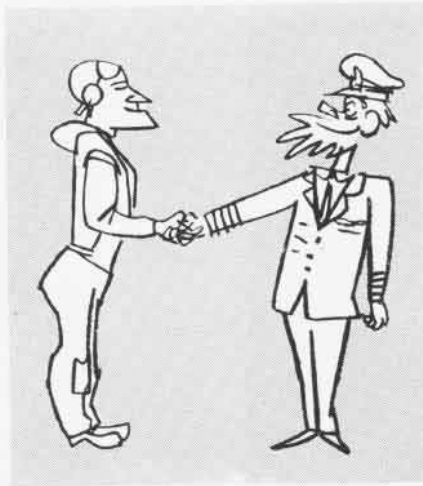
An hour after takeoff while flying at 9000 feet over Vancouver Island, the aircraft encountered ice with the outside temperature at 0° Centigrade. With an instrument minimum of 9,000 feet for this area, the pilot decided to climb to 11,000 feet, thus dropping the temperature and reducing possible turbulence over the terrain of the island. Permission was received at approximately 1015 to climb to 11,000 feet and the orderly was sent aft to instruct the passengers to secure safety belts.

Five minutes later the aircraft encountered severe turbulence and heavy ice. On solid instruments, the gyros tumbled and the aircraft began a series of progressive stalls caused by heavy ice and severe turbulence. The pilot struggled for 25 minutes but was unable to hold speed, heading, or attitude.

At approximately 1050, he had lost 4,500 feet when a moment of contact disclosed that the plane was between two mountains with instrument conditions ahead. The air here was smooth and the pilot added power to 50" HG and 2700 RPM and was able to climb to 9,000 feet and execute a 180° turn to return to Seattle. Heavy icing and further stalls and turbulence were encountered for the next 20 minutes after the turn.

Inspection of the plane upon landing revealed the following damage occurred:

a. Starboard wing upper surface



badly wrinkled from leading edge to approximately two feet aft of leading edge. Rivets on lower side pulled into the skin.

b. Port wing—similarly damaged to a lesser extent.

The accelerometer in the cockpit showed accelerations as high as 4+ G's.

The weather forecast for this trip was prepared from the weather map for 2230 of the previous day (November 25).

The 0430 PST map for November 26 showed a significant change in the direction and speed of the low pressure center and indicated the speed with which the storm center was approaching Vancouver Island. However, analysis of this map was not completed until after the NATS aircraft took off.



Grampaw Pettibone says:

I got a good scare just reading about this flight and I concur fully with the forwarding comment of the CO:

1. The Aerology routine should have permitted the pilot a better, more up-to-date, forecast than that based on the continuing reliability of a weather map analysis completed over ten hours prior to take-off.

2. Culpability also attaches to the squad-

ron flight control in that this activity did not keep informed of the sudden weather change as required by squadron directive and thus failed to warn the flight in progress."

Check That Weight and Balance!

Just after leaving the carrier deck an SBW-5 pilot stalled and hit the water with his port wing down.

Wind over the deck was 31 knots and the take-off run measured 500 feet. Two similarly loaded SBW-5's had settled at the bow on take-off indicating a minimum of airspeed for the loading condition which was as follows for all three planes:

Total weight approximately 16,500 lbs.

One Mk-10 smoke tank, weight 540 lbs, on port wing rack.

One 500 lb. GP bomb on port bay rack.

► **Comment:** The pilot and radioman in this accident were lucky to escape with minor injuries. Whoever authorized the loading and spotting of the planes was lucky too, for he would have spent many sleepless nights if these men had been needlessly killed.

The loading condition according to the investigating board gave an unbalanced moment arm of 5,906 foot pounds to port.

The space allowed for take-off was sufficient for ideal conditions with experienced pilot technique and engine developing full power. There was not sufficient safety margin for conditions other than ideal.

The 500 lb. GP bomb was apparently carried on this exercise for the sole purpose of compensating for the weight of the smoke tank on the port wing. Loading it on the port side of the bomb bay increased instead of compensating for the unbalanced condition.

Carrier pilots are handicapped in that it is not always possible for them to give their planes a careful pre-flight check, but in this instance a quick visual check would have shown the bomb and smoke tank to be on the same side and the pilot could have given the plane a 'down'.

VR-11 NAVIGATORS COURSE THE PACIFIC

IN SPITE of the many new electronic navigational aids that have come into being in the past few years celestial navigation, an ancient but highly developed science, is still the primary technique of keeping a plane on course. Here a group of VR-11 navigators stationed at the Honolulu Naval Air Station are taking sun shots between hops. Long distances are covered

over water by the Naval Air Transport Service. To maintain the record of never having lost a plane through poor navigation, VR-11 navigators must keep in constant practice. The VB-4's and NSDs used by NATS have recently been augmented by the addition of the Mars. VR-11 flies mail, men and supplies from Honolulu to Johnson, Kwajalein, Guam, and west coast U. S.



Sun Blindness

Pulling up into position for a rendezvous, following a gunnery run, an FM pilot flew directly into the sun. Blinded by the rays, he flew into his section leader.



Grampaw Pettibone says:

Anyone who would unnecessarily fly into an area which he has not visually cleared is really asking for it.

If your leader embarrasses you by placing you down-sun during a rendezvous, don't attempt to join-up until you attain a position from which you can keep him in sight during the entire maneuver. In the circumstances quoted above, the wing man after leaving the target should have flown straight ahead or to the side until he had his leader in sight. Then he could have closed the leader safely.

Bold, Never Old

Here's a case that ended in tragedy:

A young ensign, who had just reported for a new tour of duty at a Pacific base, was assigned an F6F to take up on an area familiarization flight. Contrary to all existing squadron regulations, he joined up on another F6F of the same outfit and started off on a merry rat race.

Feeling their oats, the two daredevils, the new ensign flying the wing position, flew close alongside a ship at an altitude lower than the level of the bridge. Turning around after forming a column, they almost clipped the ship's mast and then followed with a slow roll. The wingman almost flew into the water as he scooped out of a poorly executed roll. A few minutes later, after diving on a small fishing vessel, the wingman decided to slow roll again. The leader saw his wingman dive into the sea from an inverted attitude. Air/sea rescue, the fishing vessel, and the ship all turned to lend assistance. None was needed—the aircraft disintegrated upon impact.



Grampaw Pettibone says:

It is obvious that some pilots never learn soon enough. This pilot would undoubtedly be living today if he had not followed the other F6F in a series of unauthorized and dangerous maneuvers.

Let us look at this case a little longer. Having a total of 475 hours, but with only 19 hours in type, pilot was scheduled for a familiarization flight. He started off on the wrong foot by doing something he was not authorized to do. He violated squadron orders by joining up on a second F6F when he should have been learning his area and more about his aircraft. He then violated another squadron order by zooming two vessels at sea. As he slow rolled his aircraft at extremely low altitudes, he violated another squadron order which definitely stated "all acrobatics shall be completed at a minimum of 4,000 feet above the ground or water."

By not observing squadron orders and not using good common sense, the new pilot crashed to his death and the other pilot has been referred to a Naval Aviator Re-classification Board for disobedience of orders.

Statistics for the last six months show that 17 lives were lost due to flat-hatting and low altitude acrobatics. *Regulations, orders, and Flight Safety Bulletins*—all are written for the benefit of pilots and are to be complied with. When a pilot doesn't comply, he runs the risk of becoming a statistic. **DAISY CUTTERS SOON BECOME DAISY PUSHERS.**

Endurance Flight

In an effort to determine the maximum endurance of a *Corsair*, a young pilot, stationed at one of the Pacific Island bases, took off at 0300 and started his long and weary flight. By using three external fuel tanks, he was able to carry 699 gallons of gasoline. Fourteen hours, 59 minutes, and 20 seconds later, he landed his aircraft with enough gasoline for approximately an hour's flight. This endurance flight was believed to be a new record for single engine Navy fighters. A previous record, established at Patuxent River, was exceeded by 52 minutes. (Subsequently, a Marine fighter pilot flew a FG-1D at Yokosuka, Japan, for 17 hours and 5 minutes.)

This pilot is to be complimented on his initiative, endurance, and for the completion of such a long flight. He is also to be commended for the manner in which he carefully planned his power settings throughout the flight

and for attaining average consumption of slightly less than 44 gallons of gasoline per hour despite the heavy weight during the first few hours of the flight.

The flight, however, had its bad moments. After flying about two and a half hours, he encountered a heavy rain squall which put him on instruments. A let-down on instruments to 300 feet had to be made before regaining contact conditions. A few hours later he became ill from the effects of the tropical sun and was bothered by severe headaches, nausea, and dizziness during all the remainder of the time he was flying.

The only real scare, the pilot states, occurred while flying at 1500 feet over water: Trying to get the last drop of gasoline out of one tank, he did not start to shift until the engine coughed and sputtered and the aircraft started for the water. The pilot acted quickly, switched tanks, used the emergency pump, but still the engine failed to catch. At 400 feet when he was preparing to make a water landing, the engine responded and he was able to continue flight.

To overcome recurrent drowsiness, he took a benzedrine tablet at the end of the first six hours and another after ten hours of flight. Several times in the late afternoon, he dozed off into a state of semi-consciousness and was awakened by the shuddering of the *Corsair* as it fell off on a wing. Lucky pilot!



Grampaw Pettibone says:

Fine work, my boy! Your initiative, interest, energy, and patience are to be particularly admired, but . . .

That flight of yours could have ended in disaster numerous times. Drowsiness almost got you more than once, and then, that instrument let-down could have reached its low point in Davy Jones' locker. Running that tank dry at 1500 feet was almost your undoing.

Had you used all the available assistance and information at your command, you might have attained results of remarkable value. If you had collaborated with a flight surgeon who could have examined you before and after the flight, the outcome might have had greater significance for the rest of us. In addition, you should have had more information from our Test and Research Division at Patuxent River, where all experimental work on Navy aircraft is carried on.

An attempt such as this endurance flight is commendable, but it isn't the advisable thing for any pilot to pioneer without obtaining all possible assistance and reading all the guide books before starting out. Better preparation, medical advice, detailed information—all could have been of benefit to you and to us in endeavoring to obtain the absolute maximum endurance of the *Corsair*.

Thorough and careful planning are prerequisites to success in such a flight.

GRAMPAW'S SAFETY QUIZ



1. With the exception of authorized formation flying, what is the minimum distance aircraft must keep from each other in flight?
2. When running a fuel tank dry in a fuel consumption test, what procedure should be used?
3. What is the minimum altitude for fully feathering a propeller on a multi-engine aircraft for the purposes of simulated emergency operation?
4. Is it permissible to land aboard a carrier with a full or partially full droppable fuel tank?
5. Should pilot of a multi-engine aircraft open his window or overhead escape hatch in the event of fire?

Answers on Page 40