

# GRAMP AW PETTIBONE

## Don't Always Follow the Leader

Following the example of other local traffic at a small airfield without a control tower, a JRF-5 pilot attempted a 45-degree cross-wind landing. Rudder and brake could not overcome a tendency to weathercock. The plane went off the runway into sand and nosed over.

Analyzing the accident later, the pilot said:

"In this landing, poor judgment as to runway selection was made and the approach was too fast for such a small runway. In the future, I will not attempt cross-wind landings regardless of traffic conditions. If a long runway is available, the throttle can be used in a slight cross-wind landing but the brakes and rudder cannot be relied upon."

## Out of Its Class

Returning from a routine free gunnery practice, a pilot obtained permission to make dummy runs on the other planes in a TBM formation in order to give his turret gunner training in dry sighting. Approaching from above and on the port quarter, the pilot dove toward the group, intending to pull up in a steep wing-over so the gunner could get a shot at the rear planes. The maneuver, however, brought him to a near-inverted position, too close above the formation to follow through in the wing-over. To avoid a collision, he tried to roll on over and scoop out in an exaggerated barrel roll. Soon after passing the inverted position, the left wing failed. The plane crashed in an inverted spin.



 *Grampaw Pettibone says:*

The TBM is **NOT A FIGHTER!**

Torpedo bombers are restricted from most acrobatic maneuvers by Technical Order 84-42. Wing-overs and vertical turns are the only maneuvers permitted and then only when torpedoes and bombs are not carried. A comparison of permissible accelerations for fighters and torpedo planes should convince any pilot that even these maneuvers must be carefully executed. Control must be smooth because you can break any airplane with abrupt control movements. Use the accelerometer to train yourself to stay on the safe side of the designed stress limits during glide pullouts, steep



turns and the other authorized maneuvers.

Every plane is designed to withstand certain load factors and structural failure is very apt to occur if it is stressed beyond these limits. You can't tell by the size of a plane how much punishment it will stand, but you can easily find out by looking up the technical orders concerned. Anybody who exceeds these restrictions is apt to end up as a horrible example.

## Night Landing Crash

A PBM pilot was on a routine night convoy coverage flight when his instrument panel fluorescent lights failed and the Flux-Gate Compass became inoperative. The failures could not be repaired in flight so the pilot decided to return to base. To supply light on the instrument panel, he turned on the pilot's cockpit spot light which resulted in a glare and a reflection of light on the windshield. After flying the beam back to base, the pilot immediately commenced a let-down, but became confused as to his position during the final approach and flew into an ammunition mound short of the landing area.



All but two of the crew were killed.

The investigating board was of the opinion that, after becoming confused as to his exact position in his approach, the pilot should not have attempted to continue the landing but should have taken immediate action to orientate himself, definitely and correctly. There was sufficient fuel aboard to circle for several hours and the pilot easily could have requested additional lighting of the area. There was no hurry to land.

Another error that is believed to have contributed materially toward the crash was the pilot's usage of the spot light. Due to the glare of this light in the cockpit and the reflection on the windshield, neither co-pilot nor pilot was able to see the obstruction lights near the landing area and consequently was unable to determine the plane's exact position in relation to these obstructions. The pilot should not have turned on the spotlight but should have used a hand-held flashlight (which was available) with the beam directed through a piece of dark cloth. (Note: Action is being taken to install red cockpit spotlights in all patrol planes.)

Any bright white light will destroy night vision very quickly while the process of adapting one's eyes to darkness is relatively much slower. Night flying pilots should brush up on TN 19-44.

## "For Want of a Nail"

For want of a pillow in back of a short pilot his rudder control was lost; for want of rudder control his directional control was lost; and for want of directional control he ran into another plane and the use of both was lost—all for want of a pillow!

## Be Warned!

 *Grampaw Pettibone says:*

An F4F pilot usually gets hurt when his wheel crank slips out of his hand. The injuries are quite similar to those which used to happen when a model T Ford backfired while being cranked.

Both the CO and Exec got a broken arm from the first F4F-3 shipped to a squadron in the Pacific. Since then there have been a large number of fractures and bruises from the same cause.

One aviator claimed that every *Wildcat* pilot had to get hit once before he learned to respect his wheel crank. I hate to believe this, but it looks like he may be right.

But why must we learn the painful way?

## Don't Just Sit There

*It sure is comfortable to relax. But remember, there is a time and place for everything. This is the sad story of a pilot who chose the wrong time and wrong place for his resting.*

An SBD-5 made a normal landing, but had a flat tire. Although the pilot knew other planes were coming in, he allowed his plane to remain just where it stopped on the runway. The control tower called him in vain. Then what? You guessed it! The next plane to land collided with him.

Since all pilots have been instructed previously to taxi off the runway in case of a flat tire, the Trouble Board assigned 100 percent error to the pilot for disobedience of orders.

## Airplane Doctors

 *Grampaw Pettibone says:*

Before a doctor closes an incision after an operation, a nurse accounts for each instrument, clamp, sponge and piece of gauze to be sure nothing is sewed up inside the patient.

Certainly an expensive airplane, with the lives of the entire crew at stake, is entitled to the same check before an overhaul is buttoned up.

Remove all plugs and masking tape from open lines before re-connecting them.

Be sure all connections are properly seated and tight.

See that all cotter keys and safety wires are in place.

When you finish a job, make a thorough search and see that you haven't left any tools, nuts, bolts or rags lying around. In the first place, never leave such things lying around. Use trays—as all good mechs and doctors do.

Don't ever consider an overhaul job finished until you can say "I'd be willing to fly that plane myself!"

## Danger Areas

An SBD pilot, flying at 4,000 feet about three miles off the Atlantic coast, suddenly heard "a noise similar to a loud clap of the hands." Inspection in the air failed to show anything wrong. Upon returning to base, the pilot discovered a jagged hole about three inches long and an inch wide in the leading edge of the wing.

When the wing was removed, an unexploded 20 mm. high explosive incendiary projectile was found on top of the auxiliary gas tank. The nose fuse of the shell had been sheared off when it entered the wing. It was believed that a serious accident was prevented only because the shell had reached its maximum range and was tumbling when it hit.

The Trouble Board reported that the accident proved to the pilots of this squadron that firing notices must be studied while on the ground and danger



areas given a wide berth in the air. In order to make it easy for the pilots to do this, the squadron has now adopted the old Navy custom of having all local danger areas plotted on a large map. The map is kept up to date by the navigator and is hung in the ready room where pilots can take a good look at it before each flight.

 *Grampaw Pettibone says:*

You don't get the Purple Heart for getting wounded on a friendly firing range!

Firing notices are issued for your protection. Believe what they say—and don't wait to do so until somebody in the squadron gets hit.

## "It Was Then Too Late"

A TBM-1C was in the groove about 1,000 yards down-wind from the field, altitude 400 feet, airspeed 100 knots. Here's the pilot's story of what happened:

"When I applied the throttle after obtaining 18 inches of manifold pressure, it went the full length of the quadrant with no response from the motor. It seemed to me that I could make a normal landing, but when I throttled back the engine did not cut. The next thing that entered my mind was that I would overshoot the field or go over on my back when trying to brake it down after landing. While thinking this, I banked slightly to the right to clear the field and to attempt a water landing. Then I realized I



could have cut the switch and made a normal landing on the field. Of course, it was then too late. I made a fair water landing and the three of us were rescued in a matter of minutes."

The Trouble Board agreed that the pilot could have landed on the runway by cutting the ignition switch and making a dead stick landing. Because he did not, one TBM was recommended for striking and salvage.

## "I Was in a Hurry"

Here is an aviation cadet's story of how he cracked up an SNJ:

"I was scheduled as a fill-in on an authorized division tactics flight. As a result, I was in a hurry. The plane captain was sitting in the plane with the engine running. I signed the yellow sheet. Seeing that the controls were unlocked, I taxied out without testing them. With little wind blowing, I had no need for the ailerons in taxiing and did not use them. I met my division on the mat and took off in a three plane section.

"After I climbed to 100 feet altitude, the tower told me that something was wrong with my aileron. I immediately checked my aileron control. My wing went down and my plane started losing altitude. Seeing that I would be unable to effect a recovery, I turned the gas selector valve to the 'off' position. The plane hit the ground and came to rest with the engine torn off, the left wing badly buckled and the fuselage parted at the aft cockpit."

The trouble? The wooden blocks had not been removed from the ailerons.

The plane captain and the pilot were held equally responsible for this accident; the former for negligence in turning an airplane over as ready for flight with the ailerons locked, and the latter for neglecting to check his airplane (particularly the major controls) prior to take-off.

Disciplinary action was taken!

## Search Planes Collide

During search for a downed airplane, a section of three torpedo planes sighted an object in the water and dropped a smoke light. While waiting for the crash boat to arrive, the planes let down to 500 feet and circled the marker. The pilots concentrated so intently on keeping the smoke light in sight, however, that they neglected to watch out for each other.

Three men were killed when two of the planes collided.

 *Grampaw Pettibone says:*

An airplane is terribly vulnerable in the air. Most collisions are fatal and the only safeguard is your eternal vigilance.