# GRAMPAW PETTIBON

#### **Borrowed Time**

The pilot of a TBM-3E made a 30 degree glide bombing run and commenced his pullout at about three thousand feet, indicating 270 knots. He felt a severe jolt as if from turbulent air or slipstream. On completion of the pullout he noticed that his accelerometer indicated 6 G's. Both wings were wrinkled and a portion of the port elevator was torn away. After a safe landing the wingfold mechanism was found to be inoperative.

Grampaw Pettibone says: Son, I wonder if you realize just how close you came to killing yourself. I've got a thick file on pilots who weren't as lucky as you were. The maximum allow-able limits for speed and acceleration in the TBM are set forth in Technical Order 49-45. Flight Safety Bulletins 3-47 and 1-48 both contain important information for pilots who plan to do glide bombing in the Avenger.

Since you're on "borrowed time" from here on out I think the least you can do is carry copies of all three in your wallet and read them aloud whenever you find yourself surrounded by a bunch of TBM pilots.

## Dear Grampaw Pettibone:

A few days ago at a Naval Air Station on the Gulf a TBM tow plane called the tower immediately after take-off and requested an emergency landing due to the presence of gas fumes in the cockpit. Upon receipt of this transmission the tower immediately closed the field to other planes. All airborne aircraft were given instructions both on the radio and by visual signals to clear the area at once. The TBM dropped his tow, made a tight turn, and lined up for a landing on runway 7.

Four training planes, piloted by solo students, took wave-offs as directed by the tower and cleared the area—but not old DILBERT. He lined his SNJ up for a landing on runway 2. The tower immediately gave him a red light and at the same time instructed him to take a wave-off as there was an emergency in the pattern. Naturally these instructions didn't bother DILBERT. He came right on in and landed on a converging course with the TBM which was making the emergency landing. Fortunately the TBM missed the SNJ by a few feet as the two planes reached the intersection and nobody was hurt.

I think this incident illustrates that no matter what rank DILBERT may



hold or how many hours he has at the stick or yoke, he is easily recognized by continually flying with his head in the cockpit. . . An observer

Grampaw Pettibone says:

Thanks for these comments on this near accident. Any time a pilot approaches an airfield for a landing he should tune in to the tower frequency, and if he is unable to read the tower he should be on the look out for warning lights. We've already had one serious accident this year when two planes landed on converging courses at the same time.

## Egg Size Hailstones

A Marine Major was proceeding in an F4U-4 from Pueblo, Colorado, to Denver on a routine cross country flight. He had obtained VFR flight clearance from Army Flight Service at 1620. Observing scattered storm areas to the north of Colorado Springs he requested detailed weather conditions to Denver from nearby Patterson Field.

He received the Denver weather as clear, 40 miles visibility, and so proceeded on course. At about 1635 he entered what appeared to be a light haze between two storm areas. Immediately upon entering this haze a loud drumming noise warned him that he had encountered hail. He made a hurried 180-degree turn, and reduced his airspeed to 140 knots. Total time in the hailstorm was about two minutes.

The pilot then returned to Patterson Field and circled waiting for further weather information. At this time he noticed dents in the leading edges of the stabilizers. Realizing that this indicated possible damage to the leading edges of the wings, he climbed to 10,000 feet to test the stall characteristics of his plane before landing. He found that the stalling speed had been increased by about 15 knots. A successful landing was made at an airspeed of about 95 knots.

A qualified weatherman who was on the ground in the area where the hailstones were falling states that they were from one to two inches in diameter, The leading edges of the wings and horizontal stabilizer of the F4U looked as though someone had given them a thorough going over with a baseball bat.

Grampan Pettibone says:

This chap used good judgment in getting out of that hailstorm in a hurry, but the point that really pleases me is that he remembered to test his damaged F4U for a change in stalling speed. That's using the old noggin to good advantage.

#### Too Steep—Too Slow

The pilot of an F6F was cleared for take-off with a towed sleeve. He commenced his run and on coming abreast of the sleeve he pulled his plane off the runway. Take-off was made with full flap, and the plane was held in a steep angle of climb at all times. When the F6F attained an altitude of 400-500 feet it was seen to mush slightly, fall off on the left wing and dive into the ground. The plane was completely demolished and the pilot killed instantly.

Qualified naval aviators who witnessed the entire incident state that it was simply a case of not paying heed to the oft-repeated slogan "KEEP FLY-

ING SPEED."

Grampaw Pettibone says:

The "snatching" or dragging off of banner targets for air to air gunnery has always been hazardous. Pulling up sharply at low speed and low altitude violates one of the first principles of safe

The trouble usually starts when the gunnery officer warns the tow pilot that to avoid abrasive damage incident to dragging the target, the pilot must get the target and line off the deck at the earliest possible moment. Judging just where this "earliest possible moment" lies is quite a neat trick. When you do it just right you get the target off without damage and avoid spinning in to boot.

Personnel in the Bureau of Aeronautics tell me that tests are being completed now on a banner target carrier, which, when available, will eliminate the necessity for dragging off this type of target.

-KEEP PLENTY OF FLYING SPEED!

#### Dear Grampaw Pettibone:

We have a problem, and by sending it to you, we hope to receive an answer that will back up either one side or the other in its argument.

Here it is!!!

A plane is approaching an airstrip preparatory to landing. It is FIFTY (50) feet high and traveling at an indicated airspeed of EIGHTY (80) knots. The plane stalls at an indicated airspeed of SEVENTY (70) knots. There is a FORTY knot headwind.

SUDDENLY—the FORTY knots of wind stops—completely—and definitely

WHAT WILL HAPPEN TO THE PLANE??

1. Will it stall?-or-

2. Will it continue its approach in a normal manner?

3. Will it lose FORTY knots airspeed at the moment the wind stops?

4. Will the airspeed indicator in the aircraft indicate FORTY knots lower at the instant the wind stops?

That is the discussion and the problem. We hope that your answer will cover all the above-mentioned points.

Respectfully, Ens., USNR

Grampaw Pettibone says:

Your letter arrived just as we were going to press and I decided to print it to see what some of my readers have to say. I'm too smart to get caught in the middle of this argument without giving it some thought. Will give you the word in a later issue.

#### Better Off In Bed

The pilot of an AD-1 was approximately 20 miles out to sea on an ASW training flight when his engine began to cut-out intermittently. He received permission to return to the nearest field with another AD-1 as escort. The engine continued to cough and cut-out.

In an effort to rectify the trouble the pilot advanced mixture to "RICH," switched his auxiliary fuel pump to "ON," and increased RPM and manifold pressure. This did not improve engine operation. When the aircraft was about eight miles off-shore and at an altitude of 2000 feet, raw gasoline started spraying into the cockpit from the area of the right rudder pedal. The pilot opened the canopy.

A few seconds later the engine cutout again with a loud cough, igniting the gasoline in the accessory section and cockpit. The pilot immediately radioed that he was bailing out. He first attempted to leave the cockpit from the left side, but was blown back against the canopy. As the plane was now in a gliding turn to the right, he then tried to leave the cockpit by the right side. He got out on this attempt, but struck the horizontal stabilizer,

breaking his right leg.

The bailout was accomplished at 800 feet but the pilot had quite a little trouble finding the parachute release ring. He hit the water on his back a split second after the main canopy blossomed. With great effort he managed to inflate his pararaft and climb into it. About 30 minutes later he was picked up by Search and Rescue PBY. In addition to the broken leg, he suffered 2nd degree burns on both legs and severe body bruises.

Grampaw Pettibone says:

Some days a fellow would be better off just to stay in bed!

Since the plane was not recovered the cause of the engine's malfunctioning could not be determined. It is believed, however, that the gasoline which came into the cockpit on the right side was from a split in the gasoline line to the fuel pressure gage, since the pressure reading was about 4 lbs. lower than normal after the engine trouble developed, and did not come up when the booster pump was turned on.

After all these mishaps I'm sure you were mighty glad to see that PBY.

Congratulations on making good use of your safety equipment in spite of your injuries.



# Coming or Going?

The plane pictured above isn't a new model with one conventional engine and one pusher. It's just an F7F that got into quite a bit of trouble on a landing at Mustin Field, Philadelphia.

The pilot made his landing approach at about 95 knots, which is sufficient for normal control. Over the end of runway 23 he throttled back and leveled off too high. Realizing this, he started to add power just as the plane stalled to the left. The F7F hit the runway on the left wheel and left propeller. The nose veered to the left causing the right prop to touch the runway. As the plane veered off the edge of the runway the left propeller dug in and the left wing and engine tore off and revolved to the inverted position.

The pilot had his shoulder harness tight and safety belt locked and escaped this crash without personal injury.

## Spoiler At Work

The two near accidents described below were reported by Air Ferry Squadron One in recent newsletters. Both are good examples of "why pilots get grey."

Case #1: A Naval Reserve pilot reported to the squadron for a two-week tour of active duty. He picked up his first ferry aircraft, an SB2C-5, at NAS JACKSONVILLE for delivery to NAS CORPUS CHRISTI. High gas consumption necessitated a landing at NAS PENSACOLA where a check of the fuel system failed to locate any discrepancy,

and the flight was resumed.

This time the pilot was forced to land at NAS New Orleans to take on fuel. At Galveston the pilot landed again. Since the delivery point was Corpus Christi, it was decided that the fuel supply would be sufficient for the last leg of the flight. A take-off was made and the maximum manifold pressure the pilot could get was 29 inches. A hydraulic failure was experienced at this point and the pilot was unable to retract his gear. He circled the field and made an emergency landing without incident.

The squadron dispatched an experienced pilot to the spot and it was found that the hinges on the direct air ramdoor had broken and closed off the direct air. Holes were found in the gas lines leading to and from the carburetor. Besides these discrepancies, the generator was found to be hanging loosely on the bolts.

Case #2: This ferry pilot landed at an air station to refuel and had station personnel fill three of his four tanks. No gas was placed in the tank he had been using at the time of landing. After refueling, the pilot took off, still using

the original tank.

Shortly after take-off, he shifted to one of the refueled tanks and the engine cut out. He shifted to another refueled tank with the same result. Having by this time lost much altitude and all confidence in the refueled tanks, the pilot shifted back to the original tank and the engine caught.

A landing was made at the nearest field and when the tanks were drained the contents proved to be largely water.

Grampaw Pettibone says:

Gee, fellows, even a plane on its way to an overhaul shop deserves better treatment than this—to say nothing of the pilot who has to deliver it. Both of these cases could very easily have resulted in serious accidents. Don't release any plane for flight until it's been serviced—and serviced right!

Remember, aviation maintenance is one line of work where perfection pays. The pilot's life depends upon your work.