

GRAMPAW PETTIBONE

Learn and Live

Aircraft accidents cannot be avoided unless pilots are familiar with all pertinent operating instructions and safety warnings.

Accident reports indicate some pilots are unaware of the information contained in Technical Orders and Notes and Flight Safety Bulletins which have been issued with the directive, **TO BE READ BY ALL PILOTS.**

One of the simplest methods of insuring that these publications are made available and read is to place them on conveniently located file boards and to establish the "read and initial" system. The system should be policed periodically and pressure applied where necessary to make it work.

Storm Warning

A formation of six fighters took off on a navigational flight. They encountered a local storm front just short of their destination. The flight leader (1,300 hours) and his two wingmen went into the storm at 1,500 feet; the second section veered off. The leader and one of his wingmen crashed, out of control, shortly after entering the front. The third plane was thrown violently on its back, but the pilot was able to regain control and get through on instruments.



Grampaw Pettibone says:

Certainly every naval aviator has been adequately warned in Naval Aviation News, as well as through lectures, technical notes and aerological pamphlets, to stay out of storm fronts unless absolutely necessary.

Too often aviators are like small boys; it is hard for them to take warnings seriously. They are skeptical and have to try it out for themselves. In flying, however, this hard-earned knowledge often comes too late to do an aviator any good. That's why he has *got* to learn from the sad experience of others.

Loose Cargo

Prior to being catapulted in a TBF, the pilot checked his controls and found them free. Immediately after launching, the stick jammed in the back position and could not be pushed forward, nor could the effect of the up flippers be neutralized with the elevator tab. The



plane stalled and hit the water in a nose-dive attitude. The pilot and mechanic got free, but the passenger sank with the plane.

Owing to the fact that the airplane was lost, it was impossible to determine the exact cause of the accident, but it was the opinion of the Trouble Board that the mail sacks which were being carried in the second cockpit had jammed the elevator bell-crank. The Board recommended that no cargo be carried in the second cockpit unless a suitable cover is installed over controls.

► **COMMENT:** A "suitable" cover, as referred to by the Trouble Board would have to be made of metal. This is considered impracticable. The present cover is entirely satisfactory for its intended purpose—to keep dust out of the controls. A much simpler solution, when mail or cargo is carried in this airplane, is to lash it securely in the bomb or tunnel compartment.



Probably a "Graveyard Spiral"

Taking off shortly before daylight, an R4D-5 climbed to approximately 500 feet, then nosed into a gliding spiral and crashed. When questioned later, the surviving co-pilot stated there was no material failure, as far as he knew. He said the plane commander made a normal turn to the right at 500 feet and then the aircraft lost altitude at increasing speed until it crashed. The investigating board held that the pilot neglected to go on instruments when he encountered conditions unfavorable for contact flying.



Grampaw Pettibone says:

This pilot has 4,000 hours flight experience.

Here is proof, if you still need it, that you can't fly by the seat of your pants in instrument weather. Your senses will play you false unless you have a visible reference.

Review Chapter 13 of *Instrument Flight*, part one, and make up your mind always to go on instruments before visual references are entirely blotted out, while you still have time to get set.

Who Held the Bag?

While taxiing into the line after a landing, an FG-1 pilot experienced brake trouble and was not able to maintain directional control. He called the tower and was told to cut the engine and stand by. While waiting for assistance the pilot remained in the cockpit and, in his own words, "stood up so that other planes could see me." A few minutes later an F6F came barreling down the taxi strip and apparently didn't see the FG, nor its pilot, in time to avert a collision. The FG was completely destroyed, with the pilot barely managing to scramble out of the cockpit in time to save himself.

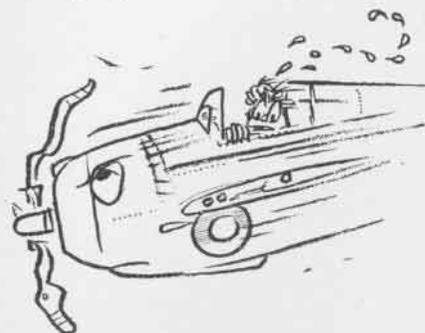


Grampaw Pettibone says:

Let's see who was to blame. *First*, the tower for not warning the F6F pilot about the stalled plane on the runway. *Second*, the F6F pilot, for not observing safe taxi procedure. *Last*, but not least, the FG pilot himself. He should have humped himself out of his plane and gone to the side of the runway, ready to flag down any approaching plane—using his skivvies, if necessary. Expenses for replacement planes and for military funerals would be considerably reduced if this procedure were followed whenever an airplane stalled on an airfield runway, the taxi strip or line.

The Mechanical Age

An FM pilot was thirty miles from his home station when his propeller went into high pitch. He attempted both automatic and manual adjustment, but was unsuccessful. He decided to return to the field at 1450 rpm. His landing approach was high and close



behind another plane. Upon being given a red light, he attempted to circle the field. He could not maintain altitude with wheels and flaps down, however, and mashed into some trees. The airplane was completely demolished and the pilot received serious injuries, including a fractured skull.

►COMMENT—A lot of money is being spent annually to equip planes so that pilots can cope with situations of this sort. Unless pilots understand the mechanics of these safeguards, however, there is little use in providing them.

A review of the mistakes made by this pilot should benefit others who may experience a similar emergency:

In the first place, the symptoms reported indicate the trouble might have been an open circuit breaker. There was no indication that the pilot checked this point.

Secondly, the pilot failed to notify the tower of his emergency and the necessity for a high approach. Had he done so, the field would have been placed in positive control and a safe landing could have been made. Not having done this, he should have checked more carefully to insure no possible interference from other planes on his initial approach.

The second mistake led to the third which involved wheels and flaps. These should not have been lowered (particularly the flaps) until the pilot was definitely committed to a landing. Also, he should have raised his wheels and flaps as soon as he started to circle the field again. This airplane will climb in full high pitch below 5,000 feet when wheels and flaps are retracted.

Untrained Reactions

On his fifth take-off during touch-and-go landing practice, a TRF pilot (288 hours) claimed that the engine twice failed to catch. His plane rolled off the end of the runway into sand where it nosed over.

The Trouble Board said: "It is considered that the pilot erred in several

respects. The plane operated normally for 40 minutes previous to the engine failure claimed by the pilot. After his last landing he spilled his flaps—according to instructions—and opened cowl flaps. By this time, at least half of the runway had been used. It is believed that the pilot then jammed his throttle on too quickly, causing the engine to cut out momentarily. With very little runway left, he undoubtedly advanced the throttle quickly again. The engine failed to catch the second time and it was then too late to stop the aircraft from rolling off the end of the runway.

"The pilot, when engine failed to develop power the first time, had sufficient runway remaining to stop the plane safely. He certainly should not have tried to get airborne the second time. Had he exercised good judgment he would have returned to take-off position and checked the engine thoroughly on the ground before attempting another take-off.

"Another thing, the pilot used brakes to stop his plane after running off into the soft sand. Standard instructions in this unit are to keep feet off brakes as soon as a plane leaves the runway. In every instance that the stick has been held back and no brakes used, planes have not nosed up or overturned."



Grampaw Pettibone says:

You have got to visualize your emergencies ahead of time and know the right answers. Unless you do, your split-second decisions and reactions in emergencies will often be wrong.

Ground Towing Technique

A recent tail wheel failure in an F4U-1 was determined to have occurred as the result of the airplane having been towed by the tail with the tail wheel in a locked position.

The contractor recommended that all units concerned with the F4U-1 be cautioned to disengage the tail wheel locking pin before towing the airplane.

►COMMENT—This caution applies to all airplanes equipped with lockable tail wheel installations. Airplanes equipped with steerable type tail wheels present special towing problems. Ground towing crews



must be familiar with the latest towing instructions as contained in erection and maintenance manuals, airplane bulletins.

Wounded by Hang Fire Shot

A pilot-gunner had fired 50-caliber armor piercing ammunition from a PMB deck turret during two runs while on a gunnery training hop. When the towplane approached again, he elevated the barrel and pressed the trigger twice. The gun did not fire. As he brought it back to the normal position, the gun went off. The bullet seriously wounded another officer in tail turret.

►COMMENT—Both hang fires and "cook-off" shots are recognized as a source of just such dangers. That is why all gunners are told to keep a hot gun pointed away from any object which might be damaged until it is ascertained by repeated charging action that the gun barrel is cleared. This accident can be attributed to failure to follow prescribed safety precautions in event of stoppage.

Engine Test on Carriers

Aboard a carrier, a plane captain started the engine of a fighter plane for a full-power run-up test under supervision of the flight deck engineering officer. While the engine was in high speed operation, the tail securing lines parted and the chocks skidded, allowing the airplane to crash head on into another plane undergoing similar test.

The propellers chewed up both planes and started a fire which burned for five minutes when one of the dropable tanks was ripped open. Two mechanics were injured by flying parts.

Due to the tremendous power developed by modern service engines, this carrier now requires, in addition to all other safety precautions, that a qualified pilot be at the controls for all full-power turn-up tests.

Lock Your Shoulder Harness

Power loss on take-off caused an SB2C pilot to make a forced landing in an uncleared area about 300 yards beyond the end of the runway. The airplane bounced when it hit and, upon contacting the ground again, turned over. The pilot received a frontal skull fracture which resulted in his death.

The commanding officer made the following statement in his administrative report on this accident:

"It is believed that had the shoulder straps been locked and not just riding on the bungee cord, the injuries to this pilot would not have been fatal."



Grampaw Pettibone says:

The shoulder harness was designed to prevent just this type of injury. It has been credited with saving hundreds of lives since it has been put in use, but it can't help unless you give it a chance.