

GRAMPAW PETTIBONE

Machine Gun Warning

After firing on the sleeve target, the waist turret gunner of a PB4Y followed through the run with his turret. As the line of sight passed by the right wing of the plane, one round "cooked off" and was discharged into the wing, doing extensive damage.

► **Comment**—This "cook off" apparently was caused by heat generated from excessively long bursts being fired immediately prior thereto. As has previously been pointed out in these columns, accidents of this type can be avoided by firing only short bursts, and by never pointing any firearm at any object one does not desire to hit.

Gunnery instructors should make certain these two safety precautions are thoroughly driven home to all gunners.

Are You An "H.P."?

Several instructors were parked at an outlying field, talking to their students. The first instructor to take off climbed steeply, then turned and dove at the other planes. This "hot pilot" evidently got a thrill out of seeing everyone duck as he missed them by only a few feet.

He pulled up steeply after the first pass, made a flipper turn and started down again. This time something went wrong, however—either in the turn or in the dive. Whatever the cause, he was still nose down when he hit the ground at high speed. Fortunately, he missed his pals.



Grampaw Pettibone says:

One irresponsible act cost this pilot his life. Many pilots are killed in similar, idiotic low-altitude maneuvers. You might try to pass it off by saying that anyone who pulls a crazy stunt like that rates what he gets, but that isn't enough. From an entirely impersonal point of view, this country just can't afford this wastage of personnel and material, either in war or peace.

In the present stage of aviation development, some training and operational losses are inevitable. They are only justified by the greater good obtained in training and operations. The attrition which results from unauthorized low-altitude maneuvers, however, has no justification whatever and, therefore, must be eliminated.

As I've often said before, it's worse for instructors to flathat than anyone else. That may seem unfair, but that's the way it is, because instructors involuntarily set the standard for their students. If students see their instructors do these things whenever they get away from official observa-



tion, students will get the idea that this is the accepted practice.

Lest some pilots already have the wrong idea, let me give you the inside dope—flathatting is definitely *not* the accepted practice. You may get away with it for a while in isolated cases, but not for long. And death isn't the only punishment you face. Court-martials, kick-outs, heavy fines, loss of wings and even commissions, all help weed out the offenders.

For those who don't see their moral responsibility in this matter, don't later say I didn't warn you.

Careless Ground Crews

The following article, quoted from the *Aviation Safety Digest* of the Ninth Marine Aircraft Wing, contains valuable advice for all units operating aircraft.

"The recent increase of aircraft accidents due to the careless handling of planes by ground crewmen is hindering the efficient operation of squadrons and calls for (1) a review of the causes of such accidents, and (2) suggested preventive measures.

"Careless taxiing by ground crewmen tops the list of these accidents and can be traced to three definite causes: (1) fast taxiing, (2) failure to watch both wing tips, and (3) misjudgment of taxiing space. The preventive measures are evident to all concerned. Taxi slowly. Watch both wing tips. Don't think there is enough space, be sure before proceeding.

"Careless warming up of the engine has, in too many cases, contributed to the fail-

ure of the engine to function smoothly in the air. Over-revving and excessive back-firing are the chief causes of such engine failures. Ground crewmen are reminded (1) *not* to exceed the recommended RPM before the oil pressure and temperature reach normal and (2) *not* to apply too much throttle during the warm-up period. These measures should be observed at all times and particularly in cold weather.

"Tampering with cockpit levers is another cause of ground accidents. Occasionally the landing gear lever is unlocked and inadvertently left unlocked, causing the landing gear to retract when the engine is started or while the pilot is preparing for a take-off. 'Don't meddle with the levers' is the best solution to this problem. If a lever must be moved, move it, but be absolutely sure it is put back in the proper position before leaving the cockpit.

"Careless handling of planes on the ground shows a dangerous lack of responsibility to the plane and to the pilot, and can result in the loss of a plane, perhaps even a life.

"Aircraft accidents due to carelessness of ground crewmen can be avoided and must, if a squadron is to get the most out of its available aircraft. A grounded plane means a grounded pilot. Keep 'em flying!"

Glassy Water

A PB4Y-5 pilot was returning to base after a training flight. Glassy water conditions existed in the landing area. The plane began a spiral turn to a landing and was still in a turn when one wing struck the water. Five of the eleven men aboard were killed in the crash.

The Trouble Board pointed out that the pilot was aware of the glassy water conditions. They recommended that pilots should never spiral to a landing if the water is glassy, but should make a long, straight approach from at least 300 feet altitude.



Grampaw Pettibone says:

Right, but the Trouble Board forgot to add something else which is equally important—that *only* power-on landings should be attempted on glassy water.

There is one other lesson in this accident for all units operating aircraft over water—the testimony of survivors brought out the fact that the regulation with regard to wearing life jackets was not being complied with on this flight.

Squadrons

LET NEWS
HEAR
FROM YOU!



PHILIPPINES BOUND: An Aviation Ordnanceman puts into practice what he learned at NATTC. He's about to arm one of the F6F's spotted on the flight deck of a carrier soon to see action.



Rear Seat Jams Controls

At 1500 feet, an SNJ was seen to enter a steep, diving spiral and crash. A student was at the controls with an instructor in the rear seat.

An examination of the wreckage revealed that the seat in the rear cockpit was facing aft at the time of the crash. The rear stick was in place and had been sheared four inches above its base.

It is the opinion of the investigating board that the cause of the crash was loss of control due to the stick being jammed forward by rotation of the rear seat. A warning plaque on the instrument panel in the rear seat of the SNJ reads: "Remove stick, instrument flight hood, and lower seat to bottom position before rotating seat."

► **Comment**—This is not a new type of accident. When the rotating rear seat is not actually used in the reverse position, such as in free gunnery, it is recommended that it be locked to face forward.

Carrier Wave-Off

During his approach to the carrier for a night qualification landing, an SB2C pilot became low and slow. He was given a wave-off by the LSO. As the pilot advanced his throttle, the nose of the plane came up sharply. The airplane stalled and spun into the water directly astern of the ship. The pilot apparently was knocked unconscious and went down with the airplane.

The accident board stated, "Pilots of this squadron again will be cautioned emphatically as to the danger of getting low and slow in the approach."

► **Comment**—Don't forget that when your elevator tabs are trimmed for landing and you have to apply full throttle suddenly, there will be a strong tendency for the nose of the plane to rise sharply. This is caused mainly by the effect of the propeller blast on the horizontal surfaces and elevator tabs. Upon sudden application of full throttle, there will also be a strong tendency for the plane to roll to the left, due to torque.

The SB2C has negative longitudinal stability under certain loading and speed conditions. Under these conditions, if the nose of the plane is displaced from neutral it will not return but will continue in the direction it was displaced. While this is not a dangerous characteristic when understood, it does demand that the plane be "flown" constantly when within the limits of negative stability.

All pilots should be familiar with TO's 30-41 and 34-43, entitled, *Stability and Controllability of Naval Aircraft Under Special Loading Conditions and Class VSB Airplanes—Effects of Rearward Center of Gravity Locations on Longitudinal Stability*. In addition, pilots should be familiar with the stability and controllability characteristics of their particular airplane; for SB2C pilots this is covered in TO 143-44.

Before attempting to make carrier landings in a new type plane, pilots should first

climb to altitude and test out its flight characteristics under carrier landing conditions. (The indicated stalling speed of a plane is the same at all altitudes.) By so doing, they will better understand the problems involved and thus be prepared to avoid them under actual conditions.

Safety Doctrine

Two recent reports have been received indicating that aircraft which were in difficulty on training flights at sea have been left unaccompanied to make their way to shore as best they could.

In one case, a squadron of fighters was conducting a search and simulated attack on a friendly vessel approximately 100 miles at sea. Noting that he was dangerously low on gas, one pilot headed for the coast as soon as he had completed his strafing run, without informing anyone of his departure. He ran out of gas before he reached his base and made a forced landing on the beach, resulting in major damage to the airplane.

In the other case, an instructor and four students were conducting gunnery runs in fighter aircraft on a tow target 10 miles off the coast. Upon the completion of the first run, one of the students reported to the instructor that his prop was "out." He was directed to put his propeller in manual control, check his instruments for proper functioning, turn off his electrical equipment to conserve power for the propeller, and return to base.

The student shortly reported that his propeller was operating satisfactorily in manual control and that he was proceeding to base. Unfortunately, in this

case the pilot failed to arrive at his destination. Exhaustive and prolonged search has failed to reveal any trace of the missing pilot.

► **Comment**—Standard doctrine in all squadrons should insure that, when circumstances permit, a second plane from the flight accompanies any aircraft in distress back to the base. This is particularly essential in over-water flight.

Circumstances always "permit" such action during training flights.

This doctrine naturally requires that pilots must notify someone in the flight when in trouble, which was not done in case one.

"Don't Lift Here"

An F4U squadron recently reported by RUDM that there had been several cases of planes tending to snap roll at high speeds. The trouble was traced to horizontal stabilizer damage which was believed to have been caused by personnel lifting the tail of the plane by placing their backs under the stabilizer. This collapsed the ribs or bent the stiffeners between the ribs, resulting in a concave surface which affected the flight characteristics of the airplane. This snap-roll tendency was corrected by replacing damaged stabilizers.

It was recommended that all personnel servicing these airplanes be warned not to lift the tail by pushing on the stabilizer and that maintenance crews stencil suitable "No-Lift" signs under the stabilizer.

► **Comment**—The importance of this warning is attested by the fact that at least one fatal F4U accident is believed to have occurred from this cause.

"No Lift" signs are now painted on these stabilizers at the factory and should be repainted after overhaul or when obliterated during service.

All squadrons should take warning from this report, since damage to flight surfaces is dangerous in any aircraft.

Doctor Chases Airplane

A doctor who gets his cases by chasing ambulances soon loses caste. Not so a Navy doctor who gets his cases by chasing Navy airplanes: that is ethical.

An air station doctor had checked out for the day. On his way to his home in town, he happened to glance up and see a likely customer fly over—a pilot in a dive-bomber was heading for the field with only one wheel down. Without uttering a single word that can be printed, the doctor swung his car around and high-tailed it back to the base.

Sure enough, the negligent pilot got past the careless tower watch and landed on one wheel. It looked as though the doctor would have a sure customer. When he arrived on the scene, however, he found his trip had been in vain—the blushing pilot was walking toward the hangar and the Assembly & Repair "doctor" was in charge of the wreck.

GRAMPAW'S SAFETY QUIZ



ALL AVIATORS should know the answers to these questions. In the air, the penalty for not knowing may prove fatal. If you miss an answer on the ground, penalize yourself by looking up the reference.

1. What is the difference between normal rated power and takeoff power?
2. Ground checking of magnetos on supercharged engines should be made at what rpm?
3. In radio equipped planes, is it necessary to call the tower for taxi instructions before leaving the parking area?
4. Is air speed alone a guarantee against stalling?
5. Under what circumstances are wheels-down forced landings recommended?

Answers on Page 40