

# GRAMPAW PETTIBONE

## Bow-Legged Student Is Preferred

After a student had made a cross-wind, small field shot, the instructor took over the controls for the take-off. The student relaxed in the rear seat with his feet flat on the floor and his knees bent inward. At this moment, the instructor pulled back on the stick to get into the air quickly to clear obstructions at the up-wind end of the field. The student's left knee became jammed between the stick and the seat. The harder the instructor pulled back on the stick, the more impossible it was for the student to get his knee clear.

The airplane ended up in a heap on the other side of the fence.



*Grampaw Pettibone says:*

Jamming the controls is a very old trick students developed for upsetting their instructors. Those with big feet jam the rudder controls and those with knock-knees jam the elevator controls, like the student above.

The only way I know to cure the rudder jamming artists is to catch them when they are young and bind their feet, as they used to do with Chinese women. I've invented a device, however, which is guaranteed to prevent knock-kneed students from jamming the stick. Hit 'em over the head with a fire extinguisher.

## Cockpit Tips For Combat

After a recent strike, a carrier squadron suggested, as a defense against breathing smoke when the aircraft is on fire, and for general protection of the face, that the oxygen mask, with diluter valve turned to OFF, be worn at all times within range of enemy AA fire.

It also was pointed out that some injuries resulted from shattered glass in the cockpit enclosure. It therefore was suggested that goggles be worn on combat runs to minimize this danger.

## Flight Leaders' Responsibilities

A good flight leader must have the confidence of his wingmen and he will only have that insofar as he demonstrates he is always watching out for their welfare. For one thing, the leader of any group of planes is solely responsible for insuring that his flight has adequate clearance from outside hazards. The following cases illustrate what happens when this is not done.

*Case 1.* Two three-plane sections took off from adjoining fields to rendez-



vous. One section violated local flight regulations by flying above the prescribed formation altitude and by flying in a restricted area over the other field. One section was in a climbing right turn and the other section was descending in a shallow right turn when the number three man in each section collided. One pilot was killed when he crashed out of control; the other was able to make an emergency landing.

Quite obviously, neither of these flight leaders, both of whom were instructors, was keeping proper lookout for other aircraft. Wingmen are too busy maintaining position to be able to detect and take individual action to avoid such hazards.

*Case 2.* A carrier air group was engaged in a training flight to develop fighter escort tactics. A section of fighters crossed in front of the formation of bombers. During this maneuver the wingman of the fighter section collided with the wingman of a section of the bombers which were being escorted. Both pilots involved in the collision were killed.

Since the bombers were not maneuvering, responsibility for this collision must rest with the fighter section. The



report was not clear as to why the fighter section was flown so close to the bombers, but this again is the leader's entire responsibility. His wingman is largely occupied with maintaining his position on the leader. The wingman of a fighter escort group should also keep a sharp lookout for enemy aircraft which he cannot do unless he has absolute confidence that his flight leader will not lead him into situations similar to the one outlined above.

## Brakes Freeze

Upon contacting the runway in a normal landing attitude, the right wheel of an F6F appeared to be frozen. The pilot managed to hold the airplane straight until it had slowed down; then it turned over on its back. An immediate inspection revealed the right wheel to be fully locked. Further investigation showed all except the outside brake discs to have annealed.

It was the opinion of the trouble board that the pilot in taxiing to the take-off position, a distance of about seven-eighths of a mile, through use of excessive RPM and improper use of the brakes, caused the brake discs to heat to such a temperature that they froze immediately after take-off.

►COMMENT—Brakes are installed primarily for controlling aircraft on landing. Abuse of brakes, such as in the above case, invariably leads to trouble.

Brakes must be used intelligently.  
Read Technical Order 49-42.

## Cheating On Flight Regs

While on a familiarization flight, a pilot put his N2S plane into an intentional inverted spin at an altitude of approximately 3,000 feet. Although the pilot applied full opposite control, the plane continued its spin and at 1,000 feet, both pilot and passenger parachuted safely. The plane was completely demolished in the crash.

The trouble board assigned 100 per cent error to the pilot for starting the maneuver at an insufficient altitude to effect a complete and safe recovery.

►COMMENT—Compliance with article 13-124(b) of BUAer Manual, which requires a minimum of 4,000 feet for practicing inverted spins, might have prevented this accident.

Safety regulations for airmen are based on millions of hours of flying experience.

Teamwork is as vital to the members of a plane crew as it is to these men running three-legged race as part of victory celebration staged aboard a carrier after Saipan invasion



## Use Best Tank

An SBD pilot *thought* he had plenty of gasoline in the right main tank, but did not bother to check the quantity gauge when given the "check-fuel-and lower-wheels" signal prior to landing. About 400 yards short of the runway, the engine cut out and the pilot was forced to land in a swampy area, causing major damage to the airplane. Upon subsequent examination, the right main tank was found dry. Ample fuel remained in the other tanks.



►COMMENT—As recommended in Flight Safety Bulletin No. 7-44, "your best tank" should always be used for landings, take-offs and other low altitude flying. That this is not being done consistently is shown by accident reports.

During a recent three-months period there were 29 accidents reported as caused by failing to shift tanks, shifting too late or using improper procedure. While no pilots were killed in these accidents, five were seriously injured and six received minor injuries. Thirteen of the airplanes involved were completely destroyed, nine required major overhaul and seven had major parts replaced. Review Flight Safety Bulletins 7-44 and 25-44.

## Aviation Accident Report Forms

Reports from the field indicate that in some cases confusion exists due to the distribution section at the end of NavAer 339A. This form is just what the instructions say it is—a worksheet to assist in obtaining complete information to be transcribed on NavAer 339. The distribution section was put in Form 339A to assist the Accident Board in compiling and distributing NavAer Form 339 with proper enclosures.

On NavAer 339, space is provided to assign percentages to pilot error, other personnel, material, with miscellaneous as the immediate cause. Directly below, space is provided for a break-down of this assignment. To conserve space the entire break-down was grouped under contributing factors. For example, a 100 percent pilot error accident may be broken down into 50 percent error of judgment, and further assigned to lack of recent experience as the underlying cause, while the other 50 percent may be assigned to poor technique with undue haste as the underlying cause. Likewise, an accident attributed 75 percent material and 25 percent miscellaneous may be broken down as 50 percent

structural, 50 percent landing gear (maintenance inspection) while the 25 percent miscellaneous may be further assigned to airport, terrain, etc. A break-down to this extent is necessary in order to initiate corrective measures.

## Tragedy of Errors

An SBD was just about to become airborne on take-off when the engine cut out momentarily then caught again. The pilot attempted to continue the take-off, but a second or so later the engine cut out and started twice again in rapid succession with a complete failure at about 60 feet altitude. The pilot immediately commenced a steep left turn to get back into the field but stalled out and crashed in a fatal spin.

The Trouble Board said: "If the pilot had cut his engine when it first showed signs of not functioning properly he could have easily stayed on the field and avoided the accident. His fatal mistake was in attempting a steep turn at such low airspeed.

"An inspection of the plane after the crash disclosed two other significant pilot errors which, although not bearing directly on the cause of the accident, showed that the pilot violated other safety rules. His shoulder straps were behind his parachute back pad, showing that he had ignored them when getting into the plane. The fuel selector valve was on the right auxiliary tank, which showed that he had not followed the check-off list.

"It is the opinion of the board that a forced landing was inevitable and a minor crash probable as the result of the engine failure. It is, however, our further opinion that the pilot showed poor judgment and poor technique, which resulted in the loss of his life."

## Ditching Drills Pay Off

While flying a routine inshore patrol the engine of an SBD failed, necessitating a forced landing at sea. Here is the pilot's statement:

►"After heading my plane into the wind, I dropped the depth charges, then checked my navigation. During these few minutes,



my radioman sent a 'returning to base' message and a distress MAY-DAY call with our position. I lowered my flaps and made a full stall landing. The jolt of the landing was terrific. *Orchids to shoulder straps!* During the period of approximately 45 seconds while the plane stayed afloat, I managed to open the hood which had jammed shut during the landing and joined my ARM who had already removed life raft.

"The significant factor and the success of this forced landing was the exactness



with which my radioman carried out the proper forced landing procedure in accordance with our pre-arranged plans. From the moment he was aware that we were having engine trouble, he had the transmitter turned on and warmed up. He had time to transmit distinctly the two messages. As we found out later, both were received. Before the plane hit the water, he was out of his 'chute ready to abandon ship. As soon as the plane stopped in the water he did not waste a second in removing the raft from the plane. Because he remembered what he had been taught regarding the operation of the raft and the use of articles stowed aboard, he was a definite asset in the life raft during our fifteen hours afloat."

## Remove All Specks

The pilot (1,414 hours) of an HE-1 was attempting a landing on a roadway in order to pick up a doctor and transport him to the scene of a crash. Everything was okay until the airplane ran off the side of the road during the landing run. The pilot said that his vision was impaired by a dirty windshield and that he could not see exactly what he was doing. *The windshield had been wiped with an oily rag.*

► *Grampaw Pettibone says:*

The trouble board assigned 100 percent carelessness to the pilot for taking off with a dirty windshield. I go along with the trouble board 99 percent. The other one percent, plus a few hours extra duty, should have been assigned to the plane captain as a reminder that when his plane is certified as ready for flight this should include a clean windshield.

I know one fighter pilot who now makes certain his windshield is absolutely spotless. One day, near the end of a combat patrol flight, he saw two planes in the distance. Knowing they could only be enemy, he signalled his wingman and gave chase. He was unable to close the range, however, and was almost out of gas before he discovered that the two enemy planes were but two dirt specks on his windshield.