GRAMPAW PETTIBONE

Good Advice

A three-plane section of fighters was taking off in consecutive order. The number two plane was unable to get airborne due to engine failure and was slowing down to taxi speed on runway. Upon noticing that number two was having trouble, the tower called the remaining fighter to hold his position, but the pilot did not hear the call and commenced his take-off without assuring himself of a clear runway. When almost airborne, he collided with the number two plane.

The accident board said: "When two or more planes take off in the same group, it is strongly recommended that wingmen make sure that the preceding planes are airborne and in the clear

before starting take-offs."

Grampaw Pettibone says:
You'll never get to be an oldtimer if you don't insure clear runways.

Not Like Golf

A student pilot was practicing S turns to a circle in an N2S. He collided with a grass mower during a take-off.



The mower was not moving at the time; the operator had left the field.

It did not have a warning flag.

Grampaw Pettibone says:

The main difference between a hazard in golf and a flying hazard is that when you don't clear a hazard in golf, only your score gets bumped. Aviation has enough natural hazards to be intensely interesting without adding artificial ones. See Flight Safety Bulletin 28-44.

Something To Think About

During an overland flight, engine failure in a PBM resulted in an emergency landing on level desert ground. The pilot (1900 hours) attempted a flaps-up, full-stall landing which ended in a violent crash.

After detailed investigation, the Commanding Officer expressed the following opinion:

"If the pilot had attempted a 'greased on' type of landing with flaps in the



down position to give a slower landing speed, a favorable landing might have been made."

▶ Comment—This is a much-discussed problem among pilots of boat-type patrol planes. The consensus appears to be that it is all a question of the attitude of the plane at the moment of contact. If the terrain is such that the hull can slide (either soft ground, hard ground, sugar cane, corn field, etc), the airplane should be flown on (not dropped in) in a slightly nose high attitude, with flaps and using power if available, until contact. Successful landings of this type have been made.

All hands in a patrol boat should jump, if possible, rather than attempt landing on ground which precludes sliding, such as mountains, woods and the like. However, if forced by circumstances to land in such terrain—for example, due to engine failure at low altitude—the best available area should be chosen and the plane set down in the slowest possible, full-stall landing.

Aftermath of a Crash

An old, sunken well was considerably damaged during the salvage of a crashed Navy airplane. In answering the farmer's damage claim, the Navy



tactfully intimated that the well was a bit decrepit to start with and that, therefore, the full cost of a new well could not be allowed. The following is culled from the owner's lengthy reply:

"I don't see how you can truthfully say that about my well. The plane also looked like an old wreck, but it was a good plane before the crash."

Emergency Landing Pointers

While on a division tactics flight, an F3A-1 experienced a lubrication failure and the engine began to smoke badly. The pilot had plenty of altitude to reach the field in a glide, but was unable to land immediately due to traffic conditions. He tried to circle the field again, but did not add throttle. Insufficient altitude forced him to land short of the field. The aircraft crashed into the wire boundary fence, ran into a ditch and turned over. The pilot was seriously injured.

After investigating the accident, trouble board gave the following opinion:

"It is better to chance the burning up of an engine in an effort to make a safe landing than to wreck the entire aircraft attempting to save the engine. Also, when a crash is imminent, the mixture control should be placed in the idle cut-off position as well as the ignition switch turned off. This will shut off the supply of fuel from the carburetor to the engine and minimize the possibility of a fire due to gasoline being pumped into the engine. If time and conditions permit, fuel selector valve should be placed in off position."

Right, and here are a few more pointers for cases such as this:

a. Don't forget to use your radio. Give the tower the bad news and they will usually be able to bring you in.

b. In case of emergency, a wheels-up, flaps-down landing can be made in a very small area, such as turf between runways, on taxiways, etc.

c. Keep as much altitude as you can until you are sure you are going to land. Then make that first approach perfect. If your engine is dead, remember to come in a little high to make sure you reach the field.

d. Don't be afraid to use full throttle in such emergencies. An engine will run for a short period with zero oil pressure. Even if you do ruin the engine coming in, that's better than wrecking the whole business making an effort to save the engine.



GRAMPAW'S SAFETY QUIZ

All aviators should know the answers to these questions. In the air, the penalty for not knowing may be death. If you miss an answer on the ground, penalize yourself by looking up the reference.

- Before leaving the parking area, is it necessary to call the tower for taxi instructions?
- 2. What is a danger area?
- 3. Before flying into a danger area what must you do?
- 4. When being relieved of the controls in flight, is it necessary to receive positive acknowledgment from the pilot relieving you?
- When complete fuel consumption from any tank is necessary what procedure should be followed?

Answers to Quiz on Page 48

Heads Up

Following a division break-up preparatory to joining the carrier landing circle, an FM-2 was seen to lose altitude in a glide until it crashed into the water.

It was the opinion of the investigating board and the commanding officer that the pilot concentrated his attention inside the cockpit while going over the check-off list and was unaware of his rapid loss of altitude.

Comment—This is not an unusual type accident. "Keep your head out of the cockpit," is one of the first principles taught in Primary and should never be forgotten when flying contact. Of course, it is necessary to make visual checks of cockpit controls, but this can be done at a glance. Never focus your attention inside the cockpit for more than a second, especially at low altitude. Altitude can be lost very quickly, as shown in this case.

The following slogan is a sentence check which should provide pilots with a system of making the necessary landing and takeoff checks without visually scrutinizing the check-off list:

Gas, guns Good And Altimeter Carburetor heat Careful Prop pitch Pilots Must Mixture Landing gear Live Tail wheel To Fight Flaps Hook Hirohito

If you don't like this sentence, try "All good pilots must contact land to find home." Or make up one of your own, but be sure it includes all the items. Note that the above list is arranged in the approximate sequence of a normal check-off.

They Don't Just Happen

Field repair men were working adjacent to a main taxi-way. Their truck and car were parked on the taxi-way with no flagmen on duty and no warning flags in place. An FM-2 returning to the line taxied directly into one of the vehicles without the pilot seeing it until too late to avoid the collision. The tower made no effort to warn the pilot.

Grampaw Pettibone says:
You'd be surprised at the wad of money expended on this type of accident each month.

I'm not trying to excuse pilots for their share of the blame, but it strikes me that compliance with Flight Safety Bulletins 28-44 (Automotive Equipment on Flying Fields) and 17-44 (Tower Responsibility) would do much to eliminate these unnecessary hazards. Any extra man-hours involved in such effort should be more than offset by a decrease of work in A&R.

Do It Right

Grampaw Pettibone says:

Do a thing right and you get results—do it wrong and you get consequences!

Check BEFORE Take-Off

A TBM-1C was seen to stall and spin in from 200 feet, as wheels were retracted following a carrier take-off. The crew was recovered, uninjured.

The cause of the loss of control in this case was at once apparent when the loading was computed. This showed that at the time of take-off, the center of gravity was approximately 34 percent of the mean aerodynamic chord. The recommended aft center of gravity limit for this airplane is 32.1 percent with wheels down, or 32.5 percent with wheels up.

Every Pilot a C.O.

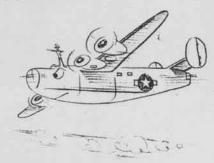
As an aviator you become commanding officer of a ship (your airplane) much quicker than anyone else in the

Deceleration Data

Accident boards are requested to include in Aircraft Accident Reports, whenever possible, the approximate deceleration of aircraft in crashes. This data furnishes valuable information for determining the strength needed in certain parts of aircraft, such as seats, to minimize personnel injuries.

The formula for approximate deceleration will be found in paragraph 3(b) of enclosure (A) to Aviation Circular Ltr. No. 48-44.

Navy. That's all to the good, but this privilege carries with it increased responsibilities. You have got to show by your



actions that you are qualified to carry out these obligations. Every flight is an exam which you flunk if you display general incompetence or irresponsibility.

"Bail Out!"

Case 1. Following a sudden engine failure at 800 ft., an SB2C pilot ordered his crewman to bail out. The crewman did not understand and was again ordered to jump, after which, the pilot saw him making preparations to go over the side. The pilot stayed at the controls to give him a better chance to get out. Altitude was lost quickly until at 100 ft., when the plane was almost completely stalled, the pilot made a long jump out over the wing and pulled his ripcord. His chute opened just before he struck the ground. The crewman left the plane immediately after the pilot, but his chute did not open.

Case 2. The starboard engine of a BD-2 caught fire at 4,000 ft. A steep dive to 3,000 ft. failed to blow out the flames. The pilot then ordered his two crewmen to bail out. One jumped, but the other in the nose compartment failed to heed the order. Again the pilot instructed him to jump. Seeing no response and surmising that the man probably was too frightened to jump, the pilot decided to attempt an emergency landing although the engine now was burning furiously. No suitable forced landing sites were in the vicinity, but the pilot managed a full-flap, full-stall, wheels-up landing in a small pasture. The airplane was demolished and both pilot and crewman were injured seriously.

▶ Comment—These are only two of numerous cases, all of which show the need for more complete indoctrination of personnel in bailing out procedures. The Parachute Sense pamphlet is recommended as required reading.

There should be a definite understanding between a pilot and his crew, or passengers, on this subject. The point should be stressed that any delay in executing an order to bail out may result in death, not only of the person concerned, but also of the pilot, if he stays at the controls too long in an effort to give that individual more time to make up his mind to jump.