

GRAMP AW PETTIBONE

Pyramid of Errors

The flight leader was a Marine pilot with 1625 hours of flying. His assignment was to lead a group of junior pilots on an extended cross-country flight. He found the radio of his plane inoperative, but rather than delay the flight he called the tower from another plane and asked permission to take-off.

Since he had no means of communication after returning to his own plane, he signaled for his flight to take-off and fly with a division just ahead. The tower called him as he left the field to say that his clearance was denied, but he had no way of hearing them. In flight he made no effort to stay close to the formation, and was last seen following a mile or so behind.

He apparently became lost and decided to land on a highway to ask where he was. He put his wheels and flaps down and picked out a straight section. Unfortunately he hit two power lines during his approach and landed with one wheel off the highway. The plane swerved to the right, dug a wing and flipped over on its back. The pilot's shoulder straps were not locked and he was killed.

The spot where the plane landed was well off the course line of the formation flight. Investigators found the fuel selector set on the main tank which contained only three gallons of fuel, although the reserve tank was full. This may account for the statement of witnesses that the plane's engine was sputtering at the time of the emergency landing. There was a large hayfield adjoining the road where the pilot could have made a safe wheels-up landing.

Grampaw Pettibone Says:

I've heard of injuries multiple and extreme, but this looks like a case of errors multiple and extreme. How any pilot with 1625 hours of flying could pack as many mistakes into one flight is beyond me. Let's add them up:

1. Violated flight regulations by requesting clearance on a cross-country flight with his radio inoperative.
2. Lagged behind the flight and allowed himself to get lost.
3. Did not use his fuel system intelligently and ran out of gas.
4. Selected an unsatisfactory landing area when there was a better one adjacent.
5. Put his wheels down for an emergency landing.



6. Forgot to lock his shoulder straps.

From the time the pilot made his first error the odds were steadily pyramiding against him. By the time he crashed he was so completely confused that every decision was wrong and he forgot his shoulder straps which at the last second might have saved his life.

GRAMP AW'S SAFETY QUIZ



1. At what altitude should you commence using oxygen: (a) Day (b) Night.
2. What is the minimum angle at which you may cross a civil airway while on instruments?
3. In an F4U is it permissible to practice (a) inverted spins, (b) normal spins?
4. It is dangerous to attempt take-off with ice or frost on the wings but loose snow on wings will blow off and not cause any trouble. True or False.
5. You have been out on a roaring bender on Friday night and only got two hours sleep. When you arrive at the hangar the next morning you discover that you have a flight scheduled. You should:
(a) Take 4 or 5 aspirin tablets in a tall glass of water and give it a try.
(b) Hide in the head.
(c) Go over the hill to avoid a court-martial.
(d) Report your condition to the Flight Surgeon or senior officer present.
(e) Phone the chaplain.
(f) Take out additional Life Insurance.

(Answers on Page 40)

Attention Tall Pilots

The pilot of an SNJ was making his approach to a landing at an outlying field. He made a fairly fast wheels landing and then suddenly nosed over. The ambulance and crash equipment sped to the plane and removed the pilot. He was conscious but in the words of the medical officer: "was found to be suffering from complete sensory and motor loss of function in the trunk and lower extremities, and partial sensory and motor loss of function in the upper extremities." His neck was fractured and despite immediate medical attention he died shortly afterwards.

The accident board believes that this pilot attempted to slow his plane down while it was still in a tail high position. The left brake apparently locked, as there was a 60-foot skid mark before the plane flipped over on its back. According to the pilot's own statement, he had his seat locked in the uppermost or top position. His shoulder harness and safety belt were properly secured.

Comment:

This pilot was nearly six feet tall—some three inches taller than the average naval aviator. The overturn structure in the SNJ does not afford adequate protection in the event of a nose over for a tall pilot if the seat is all the way up.

A check of all the SNJ nose-over accidents in the past year in which there was any injury to the pilot reveals that in 13 out of the 14 injury cases the pilots were taller than average.

In a nose-over the pilot is fully protected only if he has his shoulder harness and safety belt locked and tightened, and the seat lowered commensurate with his own height. A good way to check on this is to allow a full hand spread between the top of your head and the canopy—but don't forget to open the canopy before landing.

Check yourself the next time you fly and learn to use the seat position which affords full protection and sufficient visibility to see where you are going. After you have slowed to taxi speed—raise the seat to the top position for best visibility.



Here lies a young pilot named Snerd
Who claimed he could fly like a bird
Flat-hatting one day
He flew into the bay
And this is the place he's interred



Safety by Seeing

The picture above shows the results of a night solo landing by a primary student who didn't heed his instructors' warning about landing too long.

After landing about half way across the field and during his roll out the left wing of his aircraft collided with the right wing of another plane. The student climbed out to survey the damage and was greeted (???) by his own instructor who was flying the other plane! Sorry we can't print the conversation.

Grampaw's Letter Box

The following is from a Lt. (jg) who writes of a recent dunking:

"After a normal carrier take-off, I joined up on my section leader, and as we reached an altitude of 1,000 feet, I tried to change from my right main tank to my right wing droppable tank. The fuel selector valve seemed stuck and as my shoulder straps were rather tight, I couldn't get a good grip on it to actually apply any pressure. I released my shoulder straps to spring tension and leaned down, taking a good grip on the valve.

"I put a normal amount of pressure on it and the valve snapped inside allowing the selector switch to spin freely without stopping at any position. I kept trying to work the valve in both directions but it would just turn freely in my hand without any internal stops being felt. I assumed that the valve had jammed on the right main tank, and that in trying to change tanks the selector switch had snapped.

"I called my section leader and told him that my fuel selector switch had broken, and as I had only 55 gallons of gas left in my right main tank and couldn't change from it, I was going to return to the ship. He agreed to this and told me to drop my droppable tank. Heading back for the ship at an altitude of 1,000 feet I dropped my tank. About twenty seconds after dropping the tank the engine began to cough and sputter and then quit. I assume now that when my selector switch broke, the valve must have been turned to my droppable tank, but I couldn't do much about it then.

"I called the ship and told them I was going to land in the water. I

opened my canopy, put down my flaps, turned into the wind, made a futile attempt to restart the engine and then put all my attention to making a safe water landing. As soon as the plane came to a stop I released the safety belt and climbed out on a wing. I pulled my raft out of the cockpit and inflated it. The plane sank in about twenty seconds, so I climbed into my raft and waited for the destroyer."



Grampaw Pettibone Says:

Some days a fellow would be better off in bed. Since you were not sure which tank you were getting fuel from, it would have been a much better idea to leave everything alone for a few minutes and think of all your alternatives.



Your best bet would have been to request permission to fly to the nearest landing field accompanied by your section leader. As a second choice you could have requested permission from the carrier to land aboard with your drop tank.

However, I think this is the first case of its kind that I have heard of and I realize how easy hind-sight is. You did a swell job on your water landing and you remembered to call the carrier after your engine quit and to make proper use of your safety equipment, so don't lose too much sleep over the fact that you dropped your only available fuel into the ocean.

Don't Doze in Your Drone

Here's an accident which should be of interest to safety pilots who ride radio controlled aircraft.

During a recent radio controlled training flight, a TD2C plowed into an embankment, and as a result the plane was a total loss and the pilot was injured. Under radio control from the air and from the ground, the TD2C, with a safety pilot aboard, had successfully completed three take-offs and two landings. In the third approach the airborne control plane transferred radio control to the ground control truck. This transfer was carried out about a mile and a half away from the field

and at a low altitude in the approach.

After the wheels and flaps were put down, the drone settled below the level of the slightly elevated runway and crashed into an embankment. The investigation revealed that the pilot had attempted to take over control by throwing out the servo control and adding throttle, and also that the ground control operator had attempted to prevent the crash. The plane with its wheels and flaps down did not react immediately to full throttle and crashed in a nose high attitude.



Grampaw Pettibone Says:

I haven't mentioned much about drones such as the TD2C or the F6F-3Ks, but this accident should serve as an example of what not to do. This particular safety pilot waited too long before making a positive effort to get himself and the plane out of an embarrassing situation. Of course, the transfer from air to ground control was made at a very low altitude, but the safety pilot was on board to prevent just such an accident as this.

No matter how much confidence you have in your drone and in the radio control operator, you can't afford to doze off even for a minute. There is always a chance of a sudden wind-up due to a malfunctioning servo unit, and this hazard is greatest during landing and takeoff. The best insurance a safety pilot can have is to fly with one hand on the stick and the other on the servo throw-out control. I'm saving one of the five canes that I got for Christmas to break over the noggin' of the first safety pilot that I catch taking "reading material" along on a flight.

Shoulder Straps Save Pilot

This TBM had a complete engine failure not far from an airport. The pilot called for emergency landing clearance, but found that he was falling short of the field. He attempted a landing down a city street a few hundred yards short of the airfield. When his left wing sheared through two telephone poles, he lost flying speed and entered a spin to the left. After a quarter-turn he hit the house as pictured above. The plane was a strike and the house a wreck, but the pilot received only one small scratch—HIS SHOULDER STRAPS WERE LOCKED!

