GRAMPAW PETTIBONE

Wanted: An Opening

There's an old saying that "pride goeth before a fall". Here's an accident that happened a few months ago in which pride may have played a disastrous role. Incidently, before the day was over pride took quite a beating.

A reserve pilot was drilling with his squadron at a field a couple of hundred miles from his home base. On a Sunday afternoon he found himself scheduled to fly an SNJ back to the home station along with several other planes. However, another Weekend Warrior was using this particular SNJ at the time, so the other planes proceeded without him.

By the time the SNJ was back and fueled for the return trip, the weather was becoming marginal. The pilot was given a VFR clearance. His recent flight experience, incidently, consisted of 9 hours garnered in the SNJ during the previous 90 days.

WEAK END WARRIOR

Because of the weather conditions, he decided to follow the highway from Oklahoma City to Dallas, his destination. After crossing the Red River, with about two-thirds of his flight behind him he encountered rain and low visibility. Believing that there was a good chance that the weather had also gotten worse behind him, he decided to climb up through the overcast. He had no instrument ticket but completed the climb through (on a Federal Airway) and broke out on top at 12,000 feet. He continued to Dallas.

Over Dallas he found that he could hear the radio range, but could not receive any replies to his "What do I do now?" transmissions.

He flew west for half an hour, looking without any success for a break in the overcast, then turned around and

flew back to Dallas. By this time he had been airborne for about three hours. He couldn't tell for sure, as he had no watch and hence had to estimate the time.

With his fuel supply low and the weather very bad, he decided that he would have to jump. Not wishing to bail out over a populated area he flew north until both gas tanks were empty and then went over the side.

He was back in Oklahoma by this time and landed about 30 miles northwest of the town of Ardmore. He walked to a farm house and was taken into town where he notified authorities at Oklahoma City and at the Naval Air Station at Dallas of the events described above.

Grampaw Pettibone ays:

Honest to Pete, I don't make up these stories just to illustrate a point. They really happen.

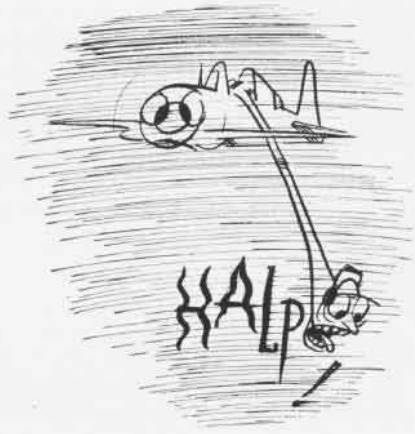
There's something downright pathetic about a pilot with nine hours of recent flight experience sitting on top of a metropolitan area at 12,000 feet with 11,600 feet of rain and soup between him and home base . . . unqualified on instruments . . . unable to make radio contact . . . in a plane not equipped for instrument flight . . . and in all probability without a let down chart.

Even though he got himself in this fix by not exercising good judgment, I found myself wondering if there wasn't something that could be done to keep things like this from happening.

The folks at Dallas may have the solution. To prevent recurrence of such situations this instruction has been added to their local Operations Manual:

"On all cross country flights where weather conditions are marginal and the possibility of encountering instrument conditions exists, the aircraft and pilot must meet instrument flight requirements."

P.S. Their Operations Officer has also been directed to "deny flight clearance for a cross country flight to any Naval Aviator in an aircraft not having a clock in operation unless the pilot possesses a suitable time piece."



His brain is the weak-end

Prematurely Gray

As we go to press, word comes of an accident of the sort that makes old men out of young pilots.

The pilot of a PV-2 taxied out and requested takeoff clearance on a relatively short runway. An automobile road ran past the far end of the runway, and beyond that a 39-foot dike sheltered the airfield.

The PV-2 carried a crew of seven and 1100 gallons of fuel. The pilot decided to put down partial flaps for minimum takeoff run. As he advanced the throttles,

both engines responded normally and all occupants of the plane are in agreement that neither failed or sputtered on the takeoff. Apparently there just wasn't enough room.

The PV-2 cleared the highway, but one wheel crashed across the top of a passing automobile. Seconds later the trailing landing gear clipped the top of the dike, slamming it back so violently that the wheels actually crashed into the wing structure with sufficient force to loosen pieces of metal on the upper surface of the wing. The main spar was cracked, and witnesses say that the tail of the plane touched lightly in the river, leaving a wake as the pilot struggled to remain airborne.

He gained a little altitude, only to find a power plant directly ahead. With full power on he made a tight right-hand turn inside the power plant and continued down the river.

Gear dangling, flaps partly down, and the airflow over the wing disrupted by large pieces of broken skin, the battle to get back to the airfield or to any suitable landing spot was on.

The river might have offered a good ditching spot except for the presence of two bridges which had to be avoided. Personnel in the tower lost sight of the plane as it disappeared beyond some low hills bordering one side of the airport.

Exactly 11 minutes after takeoff, the long slow right turn was completed and the PV-2 was headed toward the field from the south. During all this time it had not been higher than 300 feet; several times it had been maneuvered to miss buildings, hills, trees, smoke stacks. The airspeed during this wrestling match was between 75-80 knots.

The plane didn't quite make it to the runway, but a successful crash landing was executed on a level grass area short of the field. No one was injured.

The flight surgeon reports that the pilot's Schneider index was minus 5 after the accident.

Grampaw Pettibone Says:

I'm surprised it wasn't minus 15!

Naturally when the dust settled, the accident investigators broke out the slip stick and the Pilots' Operating Instructions to see what the "good book" had to say about the length of runway required for the particular conditions of load, wind, and temperature. They found some figures in red with a footnote which indicated that they were based on design calculations and hadn't been flight-tested. According to the book, the plane should have cleared the dike with room to spare.

However, the investigation also disclosed that a unit based at the field and operating PV-2's limited the fuel load to 700 gallons for takeoffs on this short runway.

With a heavier load, they request permission from the tower to use the long runway.

The business of what a plane will and won't do is a function of technique as well as design. One pilot will flatly state that a particular model will not maintain level flight on one engine at a certain weight, while another will tell you that it can be trimmed to fly hands off at this weight with one engine feathered.

Even when you think you are pretty familiar with what you and your plane can do under all conditions of loading and temperature, it pays to allow a margin for error—or, if you don't like that term, "a few extra feet of runway for the wife and children".

In a Hurry?

As the SNB approached a Marine Corps Air Station on a cross country proficiency flight, the tower was contacted and landing instructions were received. After joining the traffic pattern the pilot slowed to 110 knots and placed the landing gear lever in the down position.

The gear would not come down. On the second attempt the gear came out of the wheel wells, but then returned to the up position. After about five attempts the green light came on once, but the wheels could not be sighted visually. The horn continued to blow.

The tower was contacted and informed of the difficulty. The pilot made several additional attempts to get the gear down with the main selector and then decided to use the emergency system and to ask for a wheel check from the tower.

So far so good, but standby for what happened in the next ten minutes:

The pilot (a) didn't know the correct emergency procedure, (b) apparently didn't know that he didn't know what to do, (c) didn't use the plexiglass covered emergency checkoff list which was in the cockpit and contained a step by step sequence to be followed in lowering the gear manually, (d) landed with the horn blowing and the red light showing after the Operations Duty Officer at the field reported that his wheels appeared to be down and locked.

The co-pilot, unfamiliar with the SNB, was apparently just along for the ride.

After a roll-out of about 2000 feet, the landing gear collapsed and the Beechcraft slid to a stop on its belly.

Grampaw Pettibone Says:

Don't switch stations yet, because there's more to this tale of woe.

The accident report states that there was sufficient fuel on board for *three and one-half hours of flight* when the plane was landed with both horn and light indicating that the wheels were not locked down.

When I read that, I began to wonder if we shouldn't close shop and go out of business. In three and a half hours a heck of a lot can be learned, if you just keep cool and tell the folks on the ground what's happening.

This chap states that he could see the wheels, and therefore lost faith in the warning horn and light. He and the co-pilot were only able to move the hand crank about one quarter of a turn, because they were not employing the correct procedure.

The initial difficulty in this case was traced to improper maintenance. The switch for the electrical system had not been properly installed. However, there was nothing wrong with the emergency system. Had the pilot followed correct procedures for lowering the gear manually there need not have been an accident.

The emergency procedures vary slightly in different models of the Beechcraft, but they all have several features in common. When it has been determined that the wheels must be lowered manually, THE FIRST THING TO DO IS TO DE-ENERGIZE THE REGULAR ELECTRICAL SYSTEM. This can be accomplished by pulling out the landing gear circuit breaker (landing gear reversing switch circuit breaker in models with the dual instrument panel), or by turning off the battery and generator switches in older models which have fuses instead of circuit breakers.

Depressing the clutch on the floor board near the pilot's right foot will allow the gear to fall free. After this has been done (and not before unless you want to risk a broken arm), pull the hand crank inboard (i.e., towards the co-pilot) and turn the crank forward from the top position. Be sure that it has been turned as far as possible before releasing the clutch.

If you have turned off the battery and generator switches to de-energize the main system, you'll want to turn them on again so that you can check the wheel position with the light and horn as well as visually. Before you do this make sure that the main gear switch is in the DOWN position.

Above all—if you are not sure that you have done everything possible to get the gear down, get on the radio and ask for help. You protect yourself by doing this because many stations will then have a recording of your radio transmissions telling exactly what you have tried to do.