GRAMPAW PETTIBONE

Lightning Strikes Twice

The following two accounts are quoted from the minutes of a field Aviation Safety Council Meeting:

Item 21. DOAKES, J., Capt, USMC, AD-4B - pilot landed wheels up at air station. Pilot was using wrong radio frequency, had no landing clearance from tower, didn't circle a strange field, didn't observe tower for lights.

a. Better flight planning and use of published instructions would have prevented this accident.

Item 32. DOAKES, J., Capt, USMC, AD-4B - second wheels up landing in 39 days. Wheels watch mistook bottom fuselage light for approach light. Pilot was under emotional strain. No material malfunction.

a. Robot pilots.

b. Fixed landing gear.

Grampaw Pettibone Says:

About all I can say for this lad is that he is mighty consistent. He probably couldn't get his mind off that first landing long enough to remember to put his gear down for the second one.

When you come right down to it, a wheels-up landing is a pretty dumb stunt. Those who haven't joined the club get quite a charge out of recommendations such as robot pilots and fixed landing gear as solutions. But look at it from the angle of the pilot who finds himself the center of attraction out there on the runway. His first regret is that he didn't make a hole in the deck big enough to hide both himself and his flying machine. He searches his soul for the reason for this predicament, but being an aviator of sorts about the only justifiable answer is "it's just one of those things." In other words, by the time a crash crew arrives, our boy has convinced himself that a wheels-up landing could happen to anyone under the right circumstances.

Well, believe it or not, he is right. Pilots can go along for years with no difficulty, but there is not a pilot living who isn't faced with some emotional difficulty at one time or another during his career. As a general rule, the older a person gets the more responsibility he takes on, which forces him to adjust himself continually to changing situations. There are those who just can't adjust themselves fast enough and encounter periods of high emotional strain. This doesn't mix with flying, but then it's hard to convince some people that flying requires anything but muscular coordination.

Most of us firmly believe that we are immune to pre-occupation and mental blocks because we have enough self-discipline to leave our troubles in the ready room. This is fine until we find ourselves out in the middle of the runway sans wheels. To the question, "Wha hoppen-" we are forced to admit we were under an emotional strain. In a few cases pilots will say they thought the wheels were down. There is a slight difference between one who *thinks* the wheels are down and one who forgets them entirely. The former is a victim of a disrupted habit pattern and the latter is a victim of hyper-emotion. In either case they don't have a leg to stand on, not to mention the wheels.

It is a pretty stiff jolt for the average pilot to find himself a member of the club, and it will be a long dark night before he does it again. But if the lesson doesn't stick and he repeats the performance practically before the paint has a chance to dry on the first machine, he needs a long vacation.

Lightning has been known to strike twice in the same place with only a singe. My advice to twice-losers is to make a few changes in the thinking mechanism just to keep it from striking a third time. This might even include taking up golf on a full time basis.

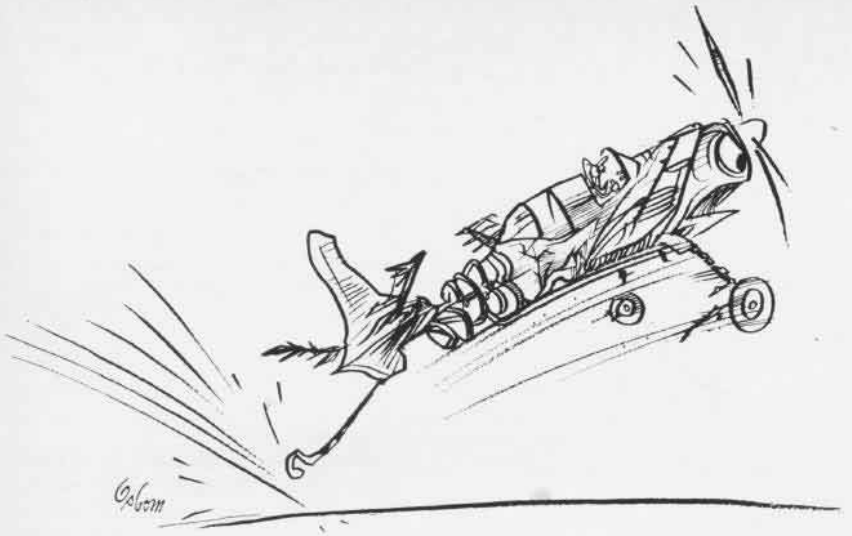
Insurance Policy

The following is an account of a fatal AD-6 accident as witnessed by the LSO:

"The pilot was making his second night field carrier landing approach. He had previously completed four peroids of NFCLP in this phase of carrier qualifications. The first pass was fair with a rather fast start. The second pass was near perfect up to the time he commenced to roll out of the final turn into the straightaway.

"While still in a 10 to 15 degree left bank with approximately 10 degrees of turn remaining, the aircraft began to lose altitude due, apparently, to the pilot's dropping the nose of the aircraft as he rolled out of the turn. I gave him a low, which he did not answer. The low was followed by an immediate wave-off.

"The wave-off was answered by an immediate burst of power. However, the aircraft continued to lose altitude and the port wing dropped quite rapidly. Initial contact with the ground did not appear to be of such extent as to render the aircraft non-flyable. The wing dragged on the ground and



the aircraft seemed to right itself enough so that the main gear was on the deck for a short while.

"At this point the aircraft became airborne again, and again the left wing dropped. The aircraft had completed approximately 125 degrees of roll and was some 130 feet abeam and to the port of the LSO platform when the port wing again came in contact with the ground. The aircraft cartwheeled and came to a stop about 300 feet to the left of the runway.

"The aircraft had apparently torque-rolled due to the sudden application of power and back stick from which complete recovery was never made. If this is not the case, then the pilot continued to drop the nose and left wing even after applying power to take a wave-off. There was never a stall due to low airspeed only. In any event, a serious accident might have been avoided had the pilot stayed on the ground once the main gear came in contact with the ground."

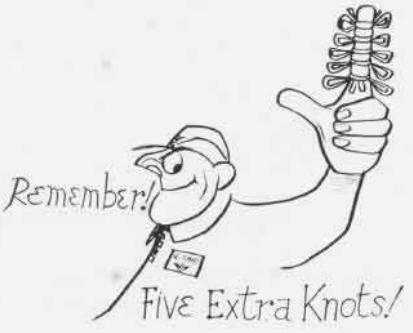
Grampaw Pettibone Says:

That's just about the way I size it up too, lad. The records show that putting a damaged plane back into the air lowers the chances for survival geometrically. Unfortunately, it seems to be a natural reaction for pilots to two-block the throttle to get out of a jam no matter what the jam may be. The only way out of a stall is increased airspeed and lower angle of attack. This should be simultaneous, but is a rather difficult maneuver at best when there is no altitude to spare.

If you are forced to maintain or increase your angle of attack to hold your altitude, you leave yourself wide open for a torque-roll in a high-powered piston aircraft. If the aircraft starts to settle and the application of power does not stop the rate of descent, pulling back on the stick will only aggravate the situation.

It is rather redundant to say the only way to beat this thing is not to let yourself get low and slow. But I'll say it over and over again. *"Watch the Airspeed!"* An extra five knots up to the final can be lost in two seconds with a little practice and it is the best insurance policy in existence. It's a policy where you are your own beneficiary. *Watch the Airspeed!* If you lose it at low altitude you have about as much chance of getting it back as you would of getting your head back if you lost that. It could be you'd lose both, but it would always be in sequence—airspeed first.

Now, on the other hand we arrive at a situation where a landing and take-off are practically one and the same thing. Whereas throttle may be used judiciously to get out of landing situation, the rule of thumb for damaged or malfunctioning aircraft on take-offs is *"Abort!"* If there is any doubt in any pilot's mind where the landing leaves off and the take-off begins, just bear in mind one thing. If any part of the airplane touches the ground, from there on, it is a take-off if you go back into the air. If you are slow enough to be on the ground, you have just landed. If it is on anything but the landing gear, you have just crashed.



I am sure that anyone in his right mind would like to know how badly damaged his flying machine is before he attempts to get it back into the blue. If he doesn't know, it is all the more reason why he should never leave the ground. Newton had the whole project wired when he said, "Momentum is more conducive to longevity, when it is decreasing." Well, he should have said it anyway.

Dear Grampaw Pettibone:

Very recently an F9F-6 pilot aborted his take-off run because of "very ineffective rudder control". It was discovered that the rudder cables had not been connected following tail removal for maintenance purposes.

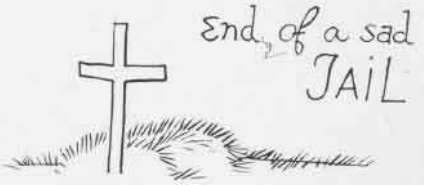
Realizing, of course, that this serious bit of negligence is not a "first" in aviation, how about the following?

This same aircraft had flown one hour and 15 minutes on the previous flight without rudder control and no mention of a rudder discrepancy appeared on the yellow sheet. Could this be the first indication of rudder control being removed from future aircraft?

LT USN

Grampaw Pettibone Says:

My hat's off to that second lad who managed to diagnose his trouble before it got out of hand. About all I can say of the first one is that he came out of it smelling like a rose.



As for your question, Bub, we both know you are pulling our weary old leg. In a jet, conscious rudder movement is practically nil for ordinary flying. In fact, on a navigation hop, you may never use rudder even in turns. But try taking off in a cross wind, or making a carrier approach, or holding the pipper on the target without it. When you need it and you ain't got it, you are like the fella who is up the creek without a paddle. The only difference is, he can get out and swim.