

GRAMPAW PETTIBONE

Hot Tires

An F9F-5 pilot returned to the ship after a scheduled practice strike and landed aboard. The landing was normal in all respects, and the aircraft engaged #2 cross deck pendant. At this point, we'll take up the pilot's statement.

"After disengaging the wire, I was motioned out of the gear by the Fly 2 Director in a normal manner, i.e., a rapid motioning to get me started out of the gear. The throttle was reduced to idle prior to passing over the barricade, and braking commenced just after passing over the barricade. As soon as I applied brakes, I realized that the braking action was very poor. I decelerated very slowly, and was conscious that the brakes were doing very little good in stopping me.

"At this point I reached for the emergency air bottle, and pulled the bottle about 20 feet from the point of collision. Braking improved some but the plane did not come to rest until it struck two F9F-6 aircraft in the after end of the pack forward.

"I wish to state that this accident possibly could have been prevented had I pulled the emergency bottle more expeditiously. However, very little time was available to take action. The collision occurred 185 feet forward of the barricade. The ineffectual braking seemed to be that which would be expected when hydraulic pressure dropped to a low amount and only the pressure developed at the foot brake was available for braking. The wings were folding at the time."



Now, let's just hold on a minute, Bub! You can pull a lot of wool over a lot of eyes, but if you pull it hard enough, you can see right through it. According to the record, the skid marks started 12 feet in front of the barricade and continued for 120 feet to where the collision occurred. This whole thing strikes me as a slight malfunction of depth perception. After coming smartly out of the gear, as is expected of everyone from the Group Com-



mander on down, you continued smartly over the barricade.

Now, if you are used to having 185 feet of space between the barricade and the after end of the pack forward to stop in, it is a little disconcerting to look up and see the after end of the pack about 50 feet closer than it oughta be. The natural reaction is to two-block the brakes, which you did. As you said, very little time was available to take action.

That's because you were going a might too fast when you crossed the barricade. Any time you have to reduce throttle to idle and lock the brakes with a 36-knot wind and 130 feet of deck in front of you, Bub, either you're fast or somebody is pulling the deck out from under you.

But what really gets me is the Investigation Board's conclusion as to the primary cause of the accident: "Poor braking action caused by hot tires and semi-liquid tar on the flight deck accompanied by a possible malfunction in the normal braking system."

Why even a Boy Scout knows that it takes friction to get a fire going. I will say one thing about this lad's action. I am sure he THOUGHT his brakes weren't working, and he did get that emergency on. A less cool head might have braced himself



and taken his chances on plowing into the pack. But even here there are two schools of thought.

It wasn't too long ago a fella crossed the barricade the same way, and he pulled the emergency air bottle. Only one of his brakes locked and his plane went over the side.

My advice is never let yourself get in a position coming out of the gear where you are forced to lock your brakes in order to stop. Skidding tires on a flight deck in a jet is like trying to stop a car on an icy hill. You have about as much control as a snow ball on top of a hot stove. The trick is to throttle back AFTER you get her rolling, not PRIOR to crossing the barricade, then pump the brakes as necessary to maintain control.

It's nice to have the LSO say, "He looked good when he went by me," but you are still responsible for that airplane up to the time it is chocked and you cut the engine. Speed from then on is a matter of agility, rather than velocity.

MEMO FROM GRAMP:

A pilot who gives a good snow job in the Ready Room sometimes gets caught in his own blizzard.

Five Knots for the Wife

The following AD spin/stall accidents are samples of how nor to make a landing approach in an airplane. This type of accident has become such a destroyer of aircraft and pilots that it is high time a little more effort be put into stopping it by the man behind the stick.

Case #1: An AD-4B pilot turned base leg at 120 knots, decelerated to 95 knots at the 90 and to 90 knots on the final. At 30 feet altitude on final, he raised the nose, and the plane stalled into the runway shearing off the port wheel and wing tip. The pilot was not injured, but the aircraft sustained Class C damage.

Case #2: An AD-6 pilot was making an approach to the carrier. His downwind leg was too close abeam the ship, a fact he did not recognize until he started the turn at the 180. At this point, he added throttle and commenced a climb. The aircraft stalled and entered the water in a level attitude 90° to the wind line. The pilot was recovered uninjured by helicopter.

Case #3: An AD-6 pilot followed an L-20 on the downwind leg. To avoid overrunning, he lengthened his approach and reduced airspeed. At the 45° position, he began to get low so added a little power and raised the nose slightly to hold his altitude. The aircraft stalled to the left and contacted the ground on the nose and port wing. It spun around and slid backward for 240 feet, burst into flames, and was completely demolished. The pilot escaped, but was seriously burned about the face, arms, and thighs.

Case #4: An AD-4 pilot was commencing an FCLP approach. On the downwind leg, he was too close abeam, but executed a nose high, partial power-on turn at the 180. The aircraft entered a spin to the left and crashed, exploding on impact. The pilot was

fatally injured.



I'll be a monkey's grampaw if I can figure why pilots refuse to use just a little common sense in making an approach to a landing. It doesn't cost anything to set up the correct pattern and speed on the downwind leg, then make an easy power-on turn into the base and final. But it seems that time is of the essence to some of these lads.

They come charging downwind as though they were going to make a pylon turn at the Cleveland Air Races, haul off the throttle, wrap up into a steep turn with nose high to lose airspeed, and suddenly find themselves settling or spinning. Or they come dragging up the groove in a nose-high attitude and stall

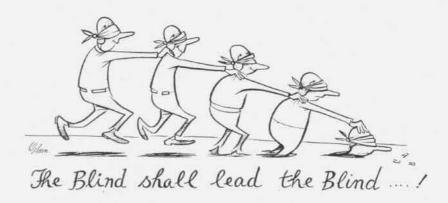
out too high.

When you try to salvage a lousy approach, you are just asking for trouble. The trick is to THINK about your approach at the break and make a good one, not wait until you find yourself turning base too close abeam, too fast or too high, too low or too slow. An AD stalls without warning with no power on and wrapped up, so why do it the hard way?

In one 30-day period this year, there were 10 such stall spin accidents in AD's resulting in eight strikes and seven fatalities. You shy lads who have an idea you don't look sharp taking a wave-off on the downwind leg would do well to think how you'll look taking a wave-off on the base leg out of a stall. That extra five knots for the wife and kids is more appreciated than you realize. If you don't have a wife and kids, five knots will get you a ticket to the beer muster at quitting time.

MEMO FROM GRAMP:

A fella who waits for something to happen is usually too late. It's happened.



GCA-ccident

A pilot of an AD-6, in the company of a chase pilot, commenced a hooded GCA approach. He was picked up at 1500 feet and given a heading. The next few minutes were utilized in a discussion of wave-off procedures, and a new heading or two were thrown in until the aircraft arrived on the final. Since the pilot had not been previously instructed to reduce to slow cruise and go over his landing check-off list, he dropped his gear and flaps and reduced power to 20" while attempting to maintain a glide path on final.

He finally settled down on the glide path and at indicated altitude of 200 feet was about to go contact when the GCA controller informed him that he was at GCA minimum and slightly below glide path. At this point the chase pilot called "wave-off," but it was too late. The aircraft struck the ground a quarter of a mile short of the runway and broke into two pieces. The pilot escaped uninjured, but the aircraft

was a complete strike.



Great balls of fire! This one really takes the cake! It took the combined efforts of two pilots and the entire GCA crew to drive that AD into the deck. A Ground Control Approach is usually a pretty well coordinated operation no matter where you are. But any operation can get fouled up if enough people take enough time to do everything wrong. Here is what happened in this case:

 The pilot was not gueried as to whether the approach was to be contact or hooded. The pilot did not announce to GCA

that he was hooded.

· At no time was he instructed to reduce to slow cruise and go over the landing check-off list.

· He was not ordered to crack the hood

at 500 feet to check altitude visually (probably because the final controller didn't know he was hooded.)

· At no time was he told what GCA minimum was or to take over visually when minimum altitude was reached.

• There was no GCA Outside Observer on duty.

• The chase pilot was at 300 feet and slightly ahead of the plane making the approach. (From this vantage point the approach plane began to look suspiciously low about the time it made contact with the ground).

 From one-half mile out GCA control went like this, "You're slightly below glide path one-half mile from end of runway. Zero-Zero-Three is your assigned heading. You're at GCA minimums. You're slightly below glide path. Runway center line is dead ahead. On scope, have you taking a wave-off to the left."

This doesn't leave much doubt as to why the accident occurred, but there's more. It seems the GCA controller had the gain on blip turned high, and the blip was touching the glide path line. On re-enacting this run it was found that with normal gain, the blip did not touch the line, but was under it. It is hard to believe that such a combination of circumstances needed to be lined up in the proper order to cause a crash as practically any one of them, if corrected, could have prevented it. It's a lead pipe cinch that none of these things happened by chance.

Ordinarily, a sharp GCA crew will put confidence into a pilot as soon as he gets on the downwind leg. Everything is like clockwork and, even without practice, a GCA run becomes simple. But when a pilot gets onto the final and has to put his gear and flaps down from memory, you can bet your bottom dollar that it's the practice, if not the rule, to conduct a

sloppy operation.

If any of you lads are making a GCA run and are not brought around to the final in accordance with published doctrine, my advice is to go contact, land, and get into a huddle with the GCA Officer. He's a pretty good Joe and would appreciate knowing if and when his crew begins to slip. By doing this you will not only help yourselves, you will also help the Navy GCA to maintain an outstanding performance record.