



GRAMPAW PETTIBONE

Slip Sliding Away

As the 53,000-pound F-14 *Tomcat* was being towed by a spotting dolly from elevator #4 into the hangar bay, the aircraft and dolly began to skid. The director blew his whistle, gave the emergency stop signal and the plane captain quickly applied the aircraft brakes. The aircraft stopped with its main mounts 18 feet inboard of the edge of #4 elevator well. The safety observer then directed the plane captain to ride the aircraft brakes lightly as they again attempted to move forward. After approximately seven feet of roll, the dolly again began to skid. Emergency stop signals were again given by the safety observer and director. The plane captain applied the aircraft brakes and the dolly driver applied his emergency brake, but the aircraft and dolly continued to slide. Fearing brake failure, the plane captain began working the hydraulic hand pump to ensure good brake pressure. The aircraft, with wheels locked, continued to skid and pushed the dolly forward, forcing it to jackknife 90 degrees to the right. The chock walkers had difficulty getting the chocks under the skidding wheels of the moving aircraft. After several tries, the chocks were in place but were merely pushed along in front of the wheels. Several individuals, at considerable personal risk, attempted to stop the aircraft by pushing on the port intake and main mount. The dolly driver tried to pull the nose of the aircraft away from the #3 elevator well. However, the dolly could not gain traction. All attempts to stop the aircraft were futile and the safety observer yelled for all hands to get clear. Blue shirts jumped clear from both main mounts, the driver leaped



off the dolly, and the plane captain jumped from the cockpit as the aircraft and dolly approached the elevator opening. The aircraft and dolly continued sliding, striking an elevator security stanchion, and sliced through the steel restraining cable. The nose wheel continued over the edge, dropping the fuselage onto the elevator well lip. As the F-14 continued to nose over, the vertical stabilizers contacted the top of the elevator well. It balanced there momentarily and then fell, impacting the water inverted, and sank within seconds.



Grampaw Pettibone says:

Holy suffering *Tomcats*! If this cat *had* nine lives, they were all used up in one fell sploosh!

This aircraft traveled a distance of 113 feet across the hangar bay and slid out the opposite elevator door. During the last 90 feet of travel, it was sliding out of control.

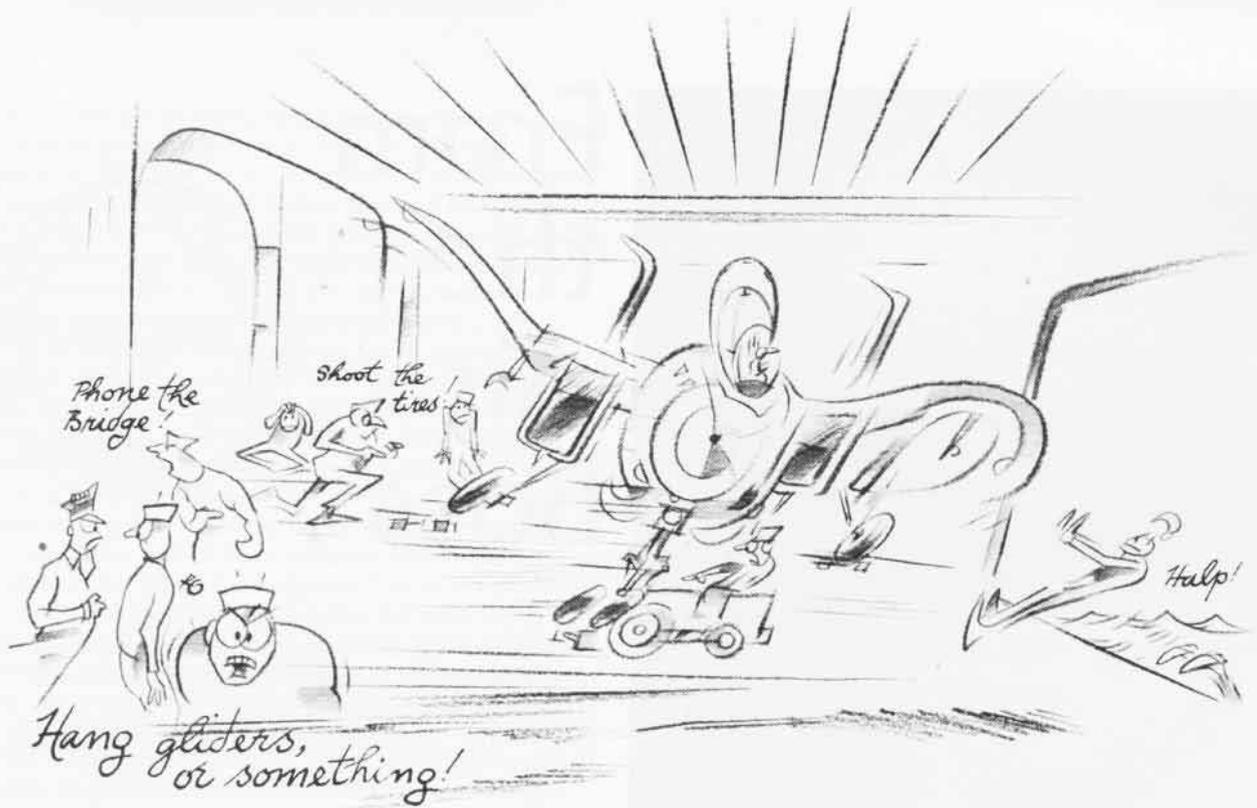
The ship was steady on course but had a 1.5-2.0 degree of starboard list, coupled with a one-to-three degree of heel, equating to approximately a five-

degree starboard list.

The overall condition of the hangar deck nonskid was reported to have been satisfactory but just a bit slicker than normal. On the night prior to the mishap, a massive spill of ethylene glycol from the arresting gear machinery occurred just forward of this area, but it had been cleaned with swabs and speedy-dry.

During aircraft movement, there is no good way of predicting the onset of vicious hydroplaning short of sliding an aircraft across the deck, which is exactly what this crew did. Only minutes before, another aircraft was moved from this same spot and experienced sliding. When the F-14 was first pulled into the hangar bay, it began to slide. Maybe this *Tomcat* should have been caged at this point! A couple of lessons learned in this mishap were: (1) As good as they may be, the SD-1D spotting dollies just don't have the power or traction required to move high-gross-weight aircraft about on a slippery deck, and (2) aircraft chocks are ineffective for stopping a sliding aircraft. Old Gramps knows both of these facts to be true as they have been documented many slides and crunches ago. But another fact is also true: Until we have better equipment in hand, we have to rely upon the wisdom of man to overcome the shortfalls of the machines. The problems associated with moving aircraft about a carrier have plagued our Bird Farms for as long as I have been growing a beard and, occasionally, we need reminding. But, dang it all, gang, two such occurrences within a year is a bit of an over (the side) kill!

As a word in defense of this crew who, for whatever reason, let this one slip through the crack, maybe we have heaped impossible responsibilities



upon them. If either of these two mishaps occurred under the guise of operational commitments, tempo of operations, can-do attitudes or inadequate support equipment, then perhaps we had better slide the tempo to a halt until we get it all in one sack, mates. Old Singed Whiskers thinks it is high time we made conservation of critical assets a serious partner in today's aviation business.

Spin Training

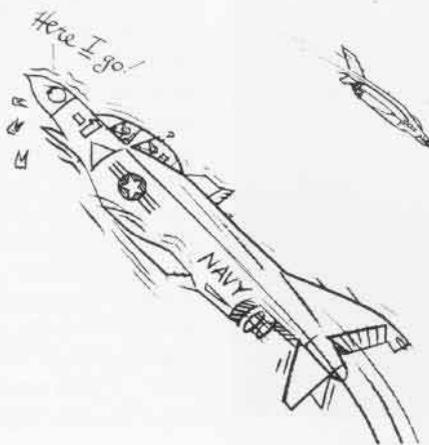
The pilots were scheduled for a basic aircraft maneuvering tactics flight in two F-4 *Phantoms*. The NFO scheduled to fly in the back seat of one was replaced by a pilot, since the flight was to terminate at another field in order to ferry an F-4 back to home field. Following a normal brief, preflight, start and taxi, the two F-4s departed for the training area.

After entering the training area, one of the F-4s set up on the left "perch" for a barrel-roll attack on the other *Phantom*. The pilot commenced his attack which was countered by a hard turn into him by the other F-4, forcing a mild overshoot.

After a series of reversals and coun-

ter reversals, the F-4 under attack turned left at a high angle of attack with full left rudder. To increase his turn rate, the pilot used some opposite aileron, at which time the F-4 departed to the right and entered a right spin.

At spin entry, the altitude was approximately 10,000 feet, airspeed fluctuating between 0 and 80 knots and angle of attack pegged at 30 units. The pilot immediately neutralized the controls and put the stick forward to unload. He then deployed the drag chute, which had no noticeable effect on the aircraft. Full forward stick, right aileron and neutral rudders were then employed.



At approximately 7,500 feet, the pilot told the back seat pilot to eject, which he did by utilizing the lower handle.

The two pilots experienced a normal ejection sequence and landed safely in the water close to each other. Two helicopters in the area responded immediately. Each aviator was picked up by a separate helo and returned to the home field dispensary.



Grampaw Pettibone says:

Jumpin' Jehoshaphat! With pilots like this one on our side, we don't need enemies! Where the heck did this pilot get his aerodynamics trainin'? Maybe he slept through the lectures. The cause of the accident was simple: a pilot-induced spin by the use of cross controls at high angles of attack — in violation of a warning in NATOPS!

Some drivers fail to understand that in actual "fighting the airplane," you lose if you spin. It is regrettable that in this day and age we lose aircraft in this manner. Bein' aggressive is certainly desirable, but this gent failed to recognize the fine line that separates aggressiveness and plain foolhardiness. (Reprint from *NANews*, June 1974.)