Grampaw Pettibone

Backyard Mechanics

During a preflight for a return trip to his NAS home base, a *Skyhawk* pilot noted a hydraulic leak near the tailhook selector valve. He assumed the responsibility of trouble-shooting and directing the repair effort, working with the host support crew while periodically telephoning maintenance personnel and the ASO at his parent command for help.

Unavailability of a part precluded complete repair of the valve. Parent command personnel recommended capping the valve and plugging certain lines. The pilot told the host crew to disable the valve. These efforts stopped the leak but the hook could be extended only once, if needed. The parent command ASO authorized a one-time flight for the A-4. No VIDS MAF was initiated for the repair action and a CDI did not inspect the work as required.

The pilot launched. Three minutes later, nearing 8,000 feet, he noted light smoke around his feet accompanied by a burning sensation in his eyes. The utility hydraulic light illuminated, so the flyer reduced power and turned toward the starting point. The fire warning light came on and the flight controls became sluggish. The pilot pulled the flight control disconnect handle but response to stick inputs was nil. He heard a pair of muffled explosions, lost generator power and made a decision. He pulled the lower ejection loop, initiating a successful egress sequence. The *Skyhawk* plummeted into the ocean. Although slightly injured, the pilot was rescued by helo and hauled safely ashore.

Grampaw Pettibone says:

Fumin' fireballs! I read up on this one and my brain boiled! Lack of knowledge and get-home-itis make a bad stew. Loss of evidence in the briny deep prevents learnin' what actually caused the problem. But we know some things. Turns out the Scooter driver was in a hurry to return to his civilian employment. He shoulda waited for the pros from his home unit, only a few highway hours away. Instead, it was maintenance by committee and Ma Bell. Help from the home unit, by the way, was hardly help. The tail hook system in the A-4 is Z-coded, which means if it's down, the bird's down.

One-time flight was right. Scratch one Skyhawk!

Canyon Catastrophe

Two predominantly helo-experienced aviators (O-4s) were cross-training in the OV-10A in anticipation of test and evaluation flying duties. They were on a multiple-stop syllabus round robin, building up time and exchanging seats after legs. Pilot "A," up front, was recently NATOPS and instrument-qualified in type. "B" was undergoing training. The *Bronco* was motoring along at 9,500 feet VFR over mountains when the pilot in command, "A," saw a rain shower at the end of a valley and made a left 270-degree turn. The surrounding mountain tops were partially hidden

ILLUSTRATED BY Osborn

by broken clouds at 14,000 feet but a two-mile-wide clear area was visible at the end of the valley 10 miles ahead. "A" began a climb to clear the peaks. Five miles later, at 11,000 feet, the backseat pilot "B" commented on the *Bronco's* poor climbing capability (compared to a helicopter).

"A" began another turn aiming for a low point in a ridge line to the OV-10's left. He applied military power and selected takeoff/land with the prop condition levers. This allowed the twin-engined aircraft to clear the saddle by 15 feet but airspeed dropped from 130 to 98 knots. The flyers had now entered a two-mile-long box canyon featuring almost vertical rock walls and a gradually rising floor. "A" traded more airspeed for altitude, slowing to 85 knots. "B" announced, "We aren't going to make it," and warned they should prepare for ejection.

A mile from the canyon's end, "A" tried a climbing right turn. Realizing it was impossible to clear the mountains he initiated command ejection with the lower handle. The *Bronco* was about 25 feet above the terrain, traveling at 70 knots with the right wing down. "B" experienced less than a full swing from his parachute before colliding with the ground. He was dragged 100 feet over the boulder-strewn earth before he could release his Koch fittings. "A's" parachute extracted but he was too close to the ground for seat-man separation and was killed on impact.

Two hikers witnessed the crash from a nearby ridge line, hurried to the site, and comforted the survivor. Three other hikers at a lower altitude trekked three and a half hours to the nearest phone. Since it was late in the day, rescue began early next morning when a CH-53A collected the party. "B" suffered minor injuries.

Grampaw Pettibone says:

Dang blast it! What happened to basic head work and solid supervision?

I know that one pilot was technically qualified in the Bronco but neither of these aviators had adequate fixed-wing experience to fly without supervision by a more experienced type. They shouldn't have gone together.

The struggle for altitude while airspeed bleeds off is a time-tested cue that trouble's a-brewin'. Some of my whirlybird buddies might argue, but I believe this crew mighta become wary a bit earlier, if they had not been used to the relatively low, slow, VFR environment of the helicopter pilot's world.

Boxed canyons have lured unprepared pilots for a long time now, no matter how many hours at the controls. Those mountains haven't lost a contest to an aircraft yet.

Respect that!

Bruised and Beet'n

A student A-7E *Corsair* pilot returned to home field after his first night, dive-bomb practice mission of the weapons training detachment. He proceeded at 300 KIAS for a six-mile, straight-in VFR approach to the field, maintaining 3,000 feet altitude until clear of the county municipal airport traffic pattern four miles to the east.

The pilot reduced speed, lowered the gear and flaps, and pushed the nose over. From his start at 1,700 feet above glide slope, just less than four miles to touchdown, he established a steep, power-off descent. Having executed this approach during the day, he estimated reaching glide slope at 800 feet altitude, 2 nautical miles from the field. He intercepted the glide slope with a high meatball at approximately 500 feet, with airspeed decelerating through 150 KIAS. He added some power and visually checked the pattern for tower-advised traffic. The pilot then observed the meatball settle rapidly below the datum lights, and quickly advanced power to military to arrest the rate of descent. Shortly thereafter, the ball disappeared off the bottom of the Fresnel lens. He noticed little or no engine response to his power addition and lowered the nose slightly to maintain optimum angle of attack.

Then the radar altimeter low-altitude warning buzzer sounded, indicating 170 feet altitude AGL. At this point, the pilot realized he was in difficulty and considered ejecting but hesitated, thinking that the engine would respond soon. Suspecting a possible engine or fuel flow problem, he selected manual fuel position. With sink rate unchecked and horizon and runway lights disappearing, he again thought of ejecting but now considered himself to be outside a safe ejection envelope.

He braced himself for collision as the aircraft impacted the ground in a farmer's cultivated beet field some 950 feet short of the runway. The aircraft plowed 500 feet through the field and came to rest. The pilot, observing flames in the cockpit area, ejected and on landing was dragged through the field 150 feet by his wind-filled chute before he could effect release.

Grampaw Pettibone says:

Holy sufferin' sharecroppers, can you beet this? This pilot was an above-average student whose inexperience suckered him into a deviation from the briefed reentry to the field. The briefed procedure called for a 1,500-foot altitude righthand base leg entry from the north to runway 26, turning inside the county airport for a two-mile, straight-in approach.

The six-mile approach, as executed in the mishap, requires a steep power-off, at a 2,500-2,700 fpm rate of descent after clearing the municipal traffic pattern. And is a far more hazardous and demanding approach, even for experienced aviators. There was no problem with the engine. With the power so far back during the descent, there was not enough time for the engine to spool-up and stop the rate of descent. This mishap represents a good example of the lost situational awareness hazards, addressed in the June 1982 issue of Approach magazine.

This error cost one A-7E and the price of a few rows of veggies, but nearly bought him the farm. Fortunately, he evaded the harvest of the Grim Reaper, was only bruised and busted a leg. Now, let's all profit from his mistake.