No Fuel—No Flame

Four A-4C drivers reported to the ready room for a night loft bombing hop at approximately 2230. The squadron was deployed at an NAAS for intensive weapons training. The flight leader briefed the hop, his third flight of the day and his sixth within 24 hours. The flight members then signed for their aircraft and proceeded to the flight line.

During preflight of his aircraft, the flight leader found that two fuel caps were not secured and questioned the plane captain. The plane captain explained that the truck had run out of fuel after pumping only 315 gallons into the aircraft and he was waiting for another refueling. The pilot checked the fuel gauge: it read 2600 pounds. He figured the 1900 pounds that had been added would give him around 4500 pounds for the flight. He decided to take the aircraft, rather than hold up the hop waiting for additional fuel.

At light off, he noted only 3200 pounds on the fuel gauge, but as the other pilots were set to go, he elected to cut the hop short but continue as briefed. The flight taxied out, took off and while in the rendezvous turn the flight leader noted his fuel aboard to be 2600 pounds. He decided he would bing out the three flights of fuel or a low state of 1200 pounds, whichever occurred first.

For the next several minutes, the pilot was completely occupied with the loft maneuvers and the position of the other aircraft in the flight. On the sixth loft at approximately 12,300 feet and 220 knots in an inverted position, the engine unwound. Recovery was accomplished by pulling the nose to the horizon and rolling out. The pilot immediately selected emergency generator, manual fuel control and, with the throttle in the idle position, turned on the air-start switch. Re-light attempts were unsuccessful, so the throttle was brought around the horn and the air start switch turned off.

After several Mayday transmissions on guard and more air-start attempts, the pilot suddenly realized the flame-out was due to fuel exhaustion—an "0" reading on the fuel gauge immediately confirmed this.

Altitude was 8000 feet at this time. As he was over a desolate area, he prepared to eject. As the aircraft was turned toward an area considered safe for ejection, the pilot saw the runway lights of the air station. Since he was in good position for a flame-out approach and realized that this predicament was totally pilot-induced, he made the decision to attempt an approach. Completely sold on the low level capability of the seat he was riding, he elected to reserve a final decision on whether to eject or continue the approach until he was at the 90° position.

Several more attempts were made to raise the tower on guard to inform them that a flame-out approach was being made, but he couldn’t get through. Passing through 5000 feet MSL, the gear was dropped and the pilot thought he saw three safe indications. Things looked good to the pilot as he passed over the threshold lights at 200 feet and 150 knots; a slight flare was commenced. As the sink rate seemed a little excessive, the flap handle was lowered in an effort to cushion the landing.

Initial touchdown felt normal, but shortly thereafter the right wing started to drop. The pilot was unable to hold the wing up and, as the wing tip contacted the runway, the aircraft porpoised again and became completely airborne. As the aircraft contacted the runway a second time, it started a severe swerve to the right. After leaving the runway and crossing a drainage ditch, it continued across several hundred yards of rough desert terrain before coming to rest against a pile of sand.

After coming to a stop, the pilot jettisoned the canopy, released his rocket jet fittings and abandoned the aircraft uninjured.

Grampaw Pettibone says:

Gimintent! Some days you can’t make a dime! Here is an experienced, well qualified flight leader charged with the responsibility of setting an example for the other lads in his flight and he accepts an aircraft with a partial load of fuel.

This conscientious gent had only four and a half hours of sleep the previous night. He had been occupied
all day with collateral duties and this was his third long bombing hop of the day. Mental and physical fatigue probably influenced his decisions throughout the entire flight. These actions—deciding to take the aircraft with a low fuel state, forgetting his fuel state, repeated attempts to get a relight before discovering fuel starvation, a decision to attempt a night flame-out approach, not utilizing the emergency gear system after deciding to land and finally not noticing the unsafe gear indication—all combine to substantiate a fatigue cause factor in this accident.

The underlying factor associated with this accident is that the pilot accepted an aircraft short of fuel, and endeavored to complete the flight as scheduled. From that point until the little bird smashed into the desert sand, each decision became more complex and involved.

The decision to attempt a night flame-out approach in an effort to bring the aircraft back is questionable to say the least. The pilot's decision was made after due consideration of his proficiency in the aircraft, an unpopulated approach path to a 14,000 foot-runway, complete control of the aircraft, and confidence in the low altitude capability of his spring seat. Although not recommended, this particular flame-out attempt would probably have been successful had the pilot lowered the landing gear with the emergency system. Flame-out approaches should not be attempted except under the most ideal "daylight" conditions—a long enough runway in an acceptable area—and only by an experienced pilot at the proper state of proficiency.

We are all real clever and appear pretty bright when afforded the opportunity to make a wise decision based on hindsight and what might have been. I'm sure no one has said anything that this pilot hasn't repeated to himself several times since this fiasco.

Retracted Rollers

Two pilots departed an East Coast air station for a syllabus familiarization and demonstration flight in an E-1B (WF-2). It was the first E-1B flown for the pilot in the right seat and also his first flight of any type in approximately 30 days.

After takeoff the instructor pilot climbed to altitude and pointed out distinguishing landmarks in the local area. He then demonstrated the different characteristics of the aircraft in both the clean and dirty configurations. The pilot in the right seat practiced stalls, recovery, and slow flight for several minutes, then proceeded toward a military field in the local area for practice touch-and-go landings.

The instructor pilot contacted the tower and received permission for practice landings. The tower directed the pilot to plan his approach for right traffic to the duty runway and a full flap touch-and-go landing was made. The instructor-pilot demonstrated 2/3 flap landings, then informed the tower that they would depart the pattern and switch pilots.

After the pilots changed positions they returned to the field, so the pilot who was under instruction could practice a few landings. The tower cleared the pilot into a left pattern for touch-and-go landing. He shot three full flap landings and one 2/3 flap when the tower advised him to plan his next approach for right traffic to the runway due to GCA traffic.

Both pilots were concerned with the GCA traffic during the approach. At the 180° position they advised the tower that gear was down. They were cleared to land. The approach was normal with good speed and lineup, but at touchdown both pilots realized the landing gear was not down. After the aircraft came to a stop, all switches were secured and the pilots evacuated.

\[\text{Granpa Pettibone says:}\]

Now doesn't a thing like this really frost you? Here are two well-qualified and supposedly professional pilots who let an interruption in their routine get them into this embarrassing mess. The pilot in the left seat had over 3000 hours total time and over 500 hours in a similar bird. It's pretty clear that he allowed a right hand pattern and concern for other traffic to get him so thoroughly confused that he just plain forgot to put his rollers down.

It's obvious that they both failed to use the "check-off list." There is no directive that requires a wheel watch for multi-piloted aircraft, but there could very well be with any more tricks like this. It's mighty hard to figure why a guy will continue an approach when he has interrupted his routine or is overly concerned about conflicting traffic.

There's really nothin' old fashioned about taking it around—A Real Pro will. It's the guy who cons himself into complacency that sets himself up for trouble and creates work for the AZ's.

Their wheels must have stopped!