

The Sinking of a Sea Knight

Two *Sea Knights* and a *Super Cobra* were en route from one base to another with one CH-46 in the lead, the second as number two and the AH-1W as number three on the left side of the flight. While over water at 500 feet, 110 knots, the torque dropped 20 percent, with a noticeable sound, and power was lost in the No. 1 engine of the second CH-46. It had six passengers on board in addition to the three-man crew.

The pilot took the controls from the copilot who had been flying the helo. The pilot immediately armed the emergency throttle system (ETS) and later stated that he then reset the No. 2 ETS, which returned the collective-mounted rocker switch to engine rpm trim function only. He wanted to deactivate the power management system in order to assure the availability of max topping power in the No. 2 engine. He hoped to restore power to No. 1.

The pilot transmitted to Lead that he had lost No. 1 but was on emergency throttle and "seemed to have regained power." The pilot then executed a right turn toward the shoreline, and as he did so, the *Super Cobra* crew radioed that the No. 2, or right-hand, engine of the CH-46 was trailing white smoke.

Believing that his remaining engine was on fire, the pilot took other corrective actions, but severe vibrations of the airframe started and he began a descent. The No. 2 engine flamed out at about 300 feet and the pilot autorotated down to the water, landing with about 35 knots forward velocity and 10-degree nose-high attitude. The ramp detached on impact and water immediately began filling the aircraft, which then rapidly rolled left, went inverted and began to sink.

A search and rescue effort commenced and personnel from the stricken helo emerged and swam toward a life raft dropped by the lead CH-46. One passenger was missing – later found unstrapped, dead inside the wreckage which was retrieved from the sea.

Investigators learned that neither engine was operating upon water entry. All lights on the cockpit's master cau-



Grampaw Pettibone says:

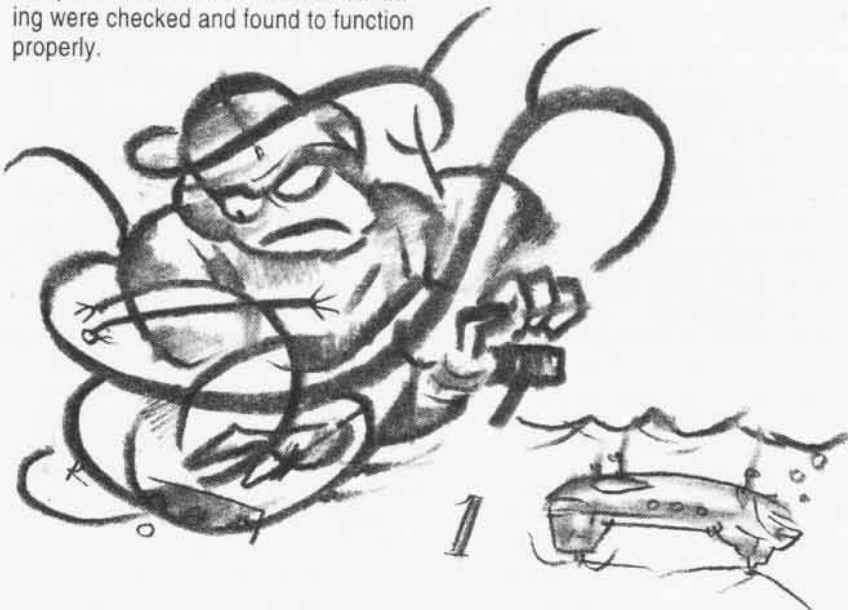
Singe my whiskers and soak 'em in seawater! This emergency was relatively simple to handle but the pilot misdiagnosed the problem and failed in several other critical areas that may have saved lives and an aircraft. Result: we lost a precious life and a helo that was likely still capable of flyin'.

The CH-46 crew failed to brief the passengers on ditching and emergency egress before the flight. One of the passengers unstrapped during autorotation and was heaved into the crew chief, preventing cabin crash preparation and life raft deployment. The passenger who died mighta released his belt at impact and become incapacitated after bein' thrown about the cabin. A briefing would have told these men to remain seated UNTIL ALL MOTION HAD STOPPED – then try to get out.

Crew coordination took a holiday on this one, big time. Indications were that the CH-46 had suffered a number one engine compressor stall. When that happens, NATOPS (Naval Air Training and Operating Procedures Standardization) sez: "Recovery can be accomplished by shutting down the affected engine and attempting a restart."

The pilot never tried to secure the

tion panel and associated electrical wiring were checked and found to function properly.



bad engine (No. 1) and concentrate on flying toward land with No. 2. He never delineated duties within the cockpit and became saturated with info while the copilot became a passenger. In the mishap report, there's confusion as to who did what.

No one could explain the white smoke, by the way.

Investigators figured there was a power surge from No. 2 engine which the pilot figured was comin' from No. 1. That made him think he had regained power. Turns out, the engineers could not produce normal power in No. 1 after restoring the wreckage. Somehow, the pilot inadvertently oversped No. 2, causing it to shut down. The engineers found No. 2 capable of functioning properly.

Sad story. 'Nuff sed.

Three for the Break

A flight of three jets in "wedge" formation approached the break for landing following an air combat maneuvering (ACM) flight with dissimilar aircraft. An FA-18C *Hornet* was in the lead with an F-5E *Tiger II* on the left and an A-4E *Skyhawk* on the right. The lead FA-18 had detached earlier due to fuel state and the second *Hornet* became flight leader.

After switching to tower frequency, the "new" leader in the *Hornet* signaled his wingman by positioning his hands alongside each other and rolling first to the left, and then the right, twice, to indicate three aircraft breaking to the left at minimum interval. The F-5 pilot signaled thumbs up and so did the *Skyhawk* pilot. The leader did not give a cross-under signal to the F-5.

The tower cleared the flight for a left carrier break. The flight descended to 750 feet with the leader planning to commence the break over the intersection of two runways. At the break point, the leader looked to his left, from the leading edge of his *Hornet*, forward. Seeing no traffic, he "kissed off" the wingman on his right and initiated a sharp left turn.

Lead suddenly felt and heard a loud thump. The A-4 pilot transmitted, "No! No!" as Lead broke. But the *Hornet* had struck the F-5. Immediately, on tower frequency, someone called, "Eject, eject, eject!" At first, the *Hornet* pilot thought he had a massive engine fail-

ure. He reduced angle of bank and reached for the ejection handle but stopped when he realized his aircraft was still flying. He continued a left-hand turn and climbed to 2,000 feet.

The F-5 had begun an easy left roll when Lead started his break. Following impact, the *Tiger* rolled right into a nose-low spiral toward the ground, striking the earth inverted, 50 degrees nose down. The aircraft exploded. The pilot was killed.

The *Hornet* sustained aileron and other damage but was controllable and made an arrested landing. The *Skyhawk* diverted to a nearby commercial field and made a safe recovery.



Grampaw Pettibone says:

Gol dang it! Why, why, why do such things happen? We do formation breaks all the time but still manage to botch 'em up - this one tragically.

Lead never gave the F-5 a cross-

under signal. He ASSUMED number three would cross under and maneuver into right echelon on his own. Then he slammed into him, believing the way was clear - a sorry exhibition of basic airwork.

Right after the pair collided, the F-5 pilot was seen leaning forward in a limp state. The cockpit appeared intact but the canopy was missing. Whatever, the *Tiger* went down quickly.

Communications - verbal and visual - took the day off. If you're not gonna give the cross under, at least transmit intentions. Turns out breaking from the wedge was not uncommon at this field, but usually the aircraft (wingman) on the left broke first.

All Gramps can say is this: if you're the leader, in similar circumstances, make sure all wingmen are on the same page. Don't create doubt.

