

Vigorous Venturi

A CH-46 was conducting a hoist evolution while two ships were unreping. In addition to the flight crew, there were five passengers onboard the *Sea Knight*. The crew had to contend with a 12-knot tailwind, driving rain and salt spray. The helicopter aircraft commander (HAC) therefore elected to perform the mission from an increased hover height.

Although the hover altitude was higher, occasional water sprays swept over the helo. These sprays were fueled by the turbulent wave activity between the ships created by the venturi effect.

As the hoist cable was retrieved after the third luggage drop, an unusually large amount of water washed over the CH-46. The number two engine began to unwind. The HAC tried to enter forward flight but couldn't maintain rotor rpm.

As rotor rpm (NR) dropped to 82 percent, the HAC executed a controlled landing in the water. He reduced collective to rebuild NR while the emergency throttle was armed to bring the engines to max power.

The engines regained full power almost immediately. No attempt was made to utilize emergency throttle actuators. The aircraft was flown free of the sea and landed at home plate without further incident. The aircraft was undamaged and postflight examination of the engines revealed no evidence of mechanical failure.



Grampaw Pettibone says:

Well, soak my brow with brine from the deep! This one coulda turned nasty. Bet those passengers in the back got a little itchy when the *Sea Knight* pancaked on the ocean.

Water between the ships was compressed, forcin' it up in sheets, kinda like clapping your hands in the bathtub. Tack on 12-knot winds from behind, a sea state of four, hard drivin' rain and the DDG's flight deck which is low to the water, and Mr. Mishap is starin' you in the face.

The water sucked down the intake was too much for the engine to swallow. But the pilots up front turned to and made a great recovery while the aircrewmembers in the back were really on the ball and closed the fuselage door



right quick to maintain watertight integrity.

Clappin' hands in the bathtub's O.K. But when a pair a ships are squeezin' the sea and you're in between, look out for flyin' water. It can drown you out — and scare the wits outa passengers in the back.

He Did It His Way

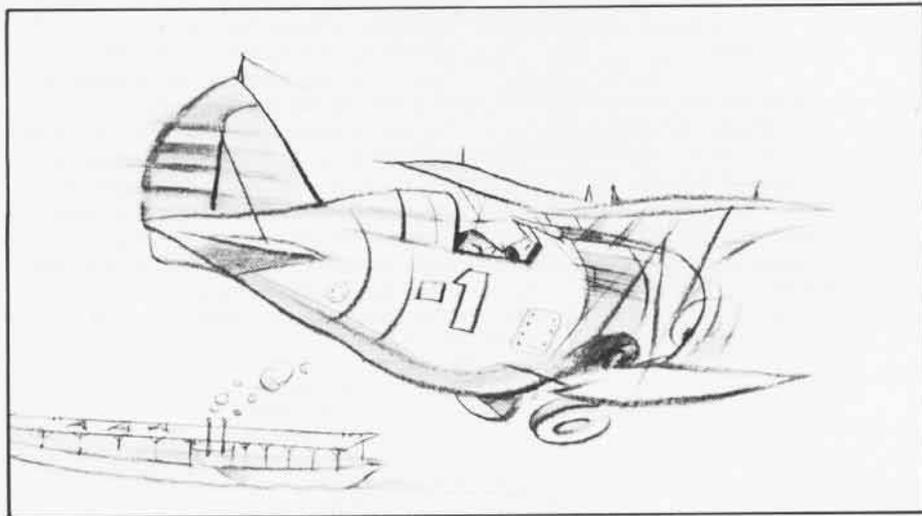
Ole Gramps heard this tale just the other day but it happened way back in the cloth helmet, biplane days aboard the covered wagon — Naval Air's first flattop — USS *Langley*. Maybe there's a lesson here, maybe not. Here goes.

An F2F squadron took on a new pilot who was independent-natured. He liked to make his own modifications to flight equipment. The radio cord was affixed to the left ear pad of his helmet but he preferred to have it on the right side. So he disconnected it and installed it on the right.

In the F2F, the pilot cranked the landing wheels down with a handle located on the right side of the cockpit. Pilots were cautioned to put "opposing" pressure on the handle during cranking because the windstream tended to hurry the gear extension, thus causing the handle in the cockpit to whip around creating the danger of breaking the handle's mounting bolts.

Next day after a mission, the F2Fs returned to *Langley* for landing. When it came time to lower his wheels, the pilot began cranking. His radio cord inadvertently became entangled with the crank. His head was rapidly drawn down toward the instrument panel, totally obscuring his view out of the cockpit.

The F2F nosed over into a sharp descent and a few seconds later, slammed into the sea. The biplane sank but, happily, the pilot managed to disentangle himself and survive to fly another day. It is not known if he con-



tinued his propensity to modify flight equipment. After a tour of duty, he left the Navy and led a long and successful civilian life.



Grampaw Pettibone says:

The old Langley Lariat almost spelled doom for this fellow. He surely put his own noose around his neck. 'Course in those days, they didn't have NATOPS (Naval Air Training and Operating Procedures Standardization) or many standardized procedures for that matter. On the other hand, could it be that an early designer put that cord on the left side just to avoid what happened to our independent-natured pioneer?

Gramps knows you folks wouldn't change your gear around without the riggers' O.K. On the other hand, we've still got Murphy's Law to contend with. Which means: If a part can be installed incorrectly, somebody will install it that way; or, if something can go wrong, it will.

Just a word to the wise from outta the past.

Turn and Burn

The maintenance controller (MC) and crew chief (CC) were absent when the weekend duty medevac pilot in command (PIC) arrived at the squadron. A junior officer with about 500 hours in model, the PIC was unsure which UH-1N was assigned as the primary medevac bird. He called the duty section flight line supervisor at home but the supervisor did not know who had MC duty because he had directed two MCs "to figure it out for themselves" before he departed for the weekend. The PIC summoned one of the MCs living at the barracks to the squadron. Next he called the CC at home, instructed him to report for duty, returned to the flight line and preflighted bird #1. (The CC swore he didn't know he had duty. He had joined the squadron four weeks earlier and no standardization check had been administered before assigning him to fly.)

The PIC noted intake pillows, covers and tie-downs in place but assumed #1 was the back-up aircraft. En route to #2 the PIC was joined by the CC. The PIC asked the CC to open the cowlings on #2, then completed his preflight. The CC did not conduct his preflight.

The MC finally arrived and #2 was made the primary medevac aircraft.

The discrepancy log indicated that a daily/turnaround inspection was required on #2 because it had expired that morning before the PIC signed for the aircraft.

Disregarding the MC, the CC removed the front tie-downs while the PIC performed the prestart checklist and started the engines.

Number one engine's inter-turbine temperature (ITT) stabilized at an abnormal 700 degrees. Number two was slow to start but the PIC was unconcerned, having had a recent similar experience. After two unsuccessful attempts at flight idle stop engagement of the number one throttle, the PIC began control checks and noted a flux in the number one ITT between 600 and 800 degrees.

The PIC asked the CC, still on the number two side, to check the number one side. The CC started for the other side and simultaneously noticed an unusual smell and white smoke coming from number one. Noticing the ITT rise and stabilize at 800 degrees, the PIC became uncomfortable and closed both throttles and fuel switches, then motored the engine attempting to reduce temperature.

The CC heard the engines being shut down and saw white smoke coming from number one engine while it was motoring. Suspecting a faulty fuel dump valve, he signaled the PIC to motor the engine once more. The PIC did so.

Noting the ITT, the PIC also motored number two engine, then number one, a third time. The PIC now smelled a fire. Smoke and flames erupted from number one. The CC discharged a halon fire extinguisher into the intake which lessened the flames.

On inspection, the CC discovered a smoldering intake pillow lodged in the number one plenum chamber and removed it. Flames erupted again and the CC used the fire extinguisher a second time.

The PIC exited the aircraft while the CC climbed onto the top of the helo and found an intake pillow lodged in the number two intake.

The crash crew, summoned by the roving security watch, arrived and put out the remaining fire.



Grampaw Pettibone says:

As Mr. Costello said to Mr. Abbott, "Who's on first?"

This outfit cooked up quite a comedy routine 'cept fires and engine damage aren't so funny. When Navy personnel don't know whether they've got the duty, their outfit is in trouble. Nobody seemed to want to take charge. What if a real life medevac went down?

Poor discipline, poor attitude, poor aircraft. These folks, especially the leaders, better get their act together. And I don't mean somethin' for "Saturday Night Live"!

