



GRAMPAW PETTIBONE

RPM Loss—Helo Lost

Arrangements were made with a West Coast air station to transport some supplies from a helicopter landing site at a forest ranger station to a youth camp. The pilot and crew of the SH-34J were well briefed on the mission and the aircraft departed for the ranger station at approximately 1500.

About 30 minutes after takeoff, the aircraft arrived at the ranger station and orbited the area several times before spotting the helicopter landing area. The difficulty in locating the landing site was due to the difference in elevation. The ranger station is at an altitude of 2,150 feet and the helicopter landing area is at an altitude of 2,500 feet.

The aircraft was hovering near the ranger station when the landing site was spotted by the crew. The pilot initiated a climbing turn, at a forward speed of 35 to 40 knots, toward the landing site nearly 400 feet above.

Things appeared normal for the



first few seconds. Then the pilot noticed that the airspeed began to drop and RPM started to deteriorate.

The pilot had started the climbing approach to the landing area without increasing power. With both airspeed and RPM decreasing, the pilot pushed the nose over to about seven to eight degrees nose down and attempted to turn away from the slope.

The pilot quickly realized he could not regain altitude or airspeed and initiated a flare above the trees. The helo hit the trees in a level attitude with very little forward speed and came to rest upright in a rocky gully.

All crew members evacuated the aircraft before it started to burn. The helo was completely destroyed by fire.



Grampaw Pettibone says:

Oh, my achin' ulcers! This flight started out as a mission of good will and nearly ended in a tragedy. We've had entirely too many accidents of this type. There's really no excuse for it.

High density altitude helicopter operations are hazardous but can be safely conducted with proper training, briefing, and a thorough knowledge of the hazards that can be encountered (RPM, airspeed, power settling, turbulence, etc.). In the near future, the pamphlet *Mountain Flying Sense* will be distributed to all commands operating helicopters. The new helicopter NATOPS manuals contain a special section entitled "Mountain and Rough Terrain Flying."

The pilot listed the following as contributing factors in this accident: (1) Ascending approach to landing area; (2) unknown wind condition; (3) unfamiliarity with the area of operation; (4) no recent practice on high altitude, mountainous terrain operations. I agree with this lad 100%, but 20-20 hindsight can get you into real trouble.

Stoof Goof

An S-2A crew filed for a local night flight. After approximately two and one half hours in the local area, they returned to the field for



some night mirror landing practice.

While in the local area, the two pilots exchanged seats so the co-pilot could make the first mirror landings. After shooting six landings, the aircraft cleared the pattern and the pilots again changed seats, so the plane commander could make a few mirror landings before completing the flight.

The plane commander made eight normal landings but, during the ninth approach, he was forced to extend the downwind leg because of other traffic. He had about decided to take a waveoff and re-enter the pattern when the aircraft ahead of him took a waveoff. At this point, the pilot quickly elected to salvage the approach and land. He was able to maneuver into a fair position and continued the approach to touchdown. The pilot made a fairly good landing but, immediately after touchdown, he became rudely aware that he had forgotten to lower the landing gear.



Grampaw Pettibone says:

Oh, my achin' ulcers! It's a proven fact that all the machines we operate are pretty accustomed to landin' on a set of wheels and it's darn near impossible to break 'em off that habit without bustin' up somethin'.

We're all more likely to miss somethin' on the check-off list when our habit pattern is interrupted—we break our routine or we're distracted by traffic—but that's no excuse to land with the wheels in the well.

These lads must've had their minds on anything but flyin' this bird 'cause there's several indications in the cockpit to let you know when the gear is down. In addition to the wheel lever and indicators, how about power settin's and trim? You've got to overcome that parasite drag with somethin'.

It all boils down to the simple fact that you're askin' for trouble when you don't use that check-off list and attempt to salvage a poor approach to a landing. These are fundamentals of airmanship that should have been learned in the Training Command.

Tree Topper

An A-1H pilot was on a routine ferry flight between two East Coast air stations when he heard on two occasions a sound similar to back-

firing. No vibrations were associated with the noise and, after checking the engine instruments, the pilot decided things looked about normal. The following readings were noted: CHT, 210° C.; CAT, +5° C.; oil temperature, 72° C.; and oil pressure, 86 psi.

A few minutes later the backfiring occurred again. The only engine instrument change noted was an increase in the CHT to 220° C. The pilot selected rich mixture and the CHT returned to 210° C. He then selected alternate air and observed the CAT increase to 32° C. Approximately 15 seconds later, direct air was selected and the CAT returned to +5° C. The pilot returned the mixture to the normal position and decided to land at a civilian field, approximately 15 miles from his position.

He contacted the tower and received clearance for a precautionary landing. Abeam of the runway, at an altitude of 2,500 feet, the A-1H was cleared number 2 behind a C-130 on a 2½ mile final. The pilot took interval on the C-130 which put him an additional ¾ mile downwind of the 180° position.

As the pilot started his turn to base leg, the engine quit. He immediately declared an emergency and continued the approach. As he passed the 90° position, it became apparent that he would not make the runway, so he reversed

his turn and headed for the only clear area in sight. On short final to the cleared area, the pilot lowered the flaps at tree top level and hit the top of the first tree at about 105 knots. One or two seconds after the collision, the engine started firing. The burst of power was sufficient to regain flying speed, so the pilot turned back to the runway, made a normal landing and taxied to the ramp.

The aircraft sustained substantial damage on the impact with the tree top but the pilot was uninjured.



Grampaw Pettibone says:

Egads, lad! Somebody could've got hurt! Just what does it take for a gent to get the message that he just might have a load of carb ice? Conditions were ideal for this sort of thing. After going to rich mixture and alternate air, engine operations smoothed out. So why return to a set-up that caused the trouble in the first place?

A CAT of 32° C. is well within max operating limits for this engine, but it's pretty evident the pilot just didn't know too much about his machine. Even after decidin' to land and have a look-see, our boy fails to declare an emergency and lets himself get sucked way out of position for even a precautionary landing.

This whole embarrassin' bit is a result of the pilot's not knowin' his bird and then usin' poor headwork in an emergency.

