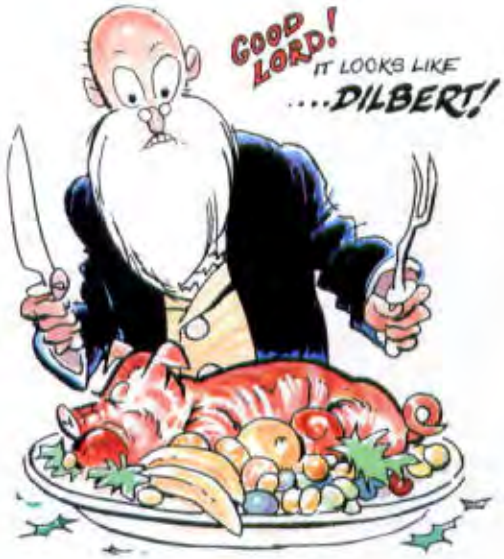
Illustrations by Ted Wilbur

Mentor's Lament

Five T-34C *Turbo-Mentors* carrying eight instructors and two students were on cross-country flights to NAS East Coast. At the departure point, although not properly scheduled to do so, the pilots of the five aircraft planned to proceed separately in two two-plane sections plus a solo, and to join up over an island to fly in formation to the destination. The solo arrived over the rendezvous point first and joined on the first two-plane section upon its arrival. When the second section reached them, they formed a diamond-plus-one formation at 2,500 feet. The T-34Cs then proceeded toward the destination at 150 knots.



The port wingman (Alpha) broke from the formation to take pictures. The slot aircraft moved forward to the port wingman position and the fifth plane (Bravo) moved into the slot. Alpha took photos from the right side of the formation and was next observed beneath the diamond. Alpha was observed to drift aft and up toward Bravo in the slot. Alpha's vertical stabilizer struck the aft section of Bravo's nose wheel well. As Alpha pitched nose high, Bravo's propeller severed the empennage of Alpha's *Turbo-Mentor.* Alpha climbed several hundred feet, passing directly over Bravo, and then entered uncontrolled flight to the right, rotating slowly in a nearly flat attitude as it fell earthward.

Approximately 30 seconds after the collision, Alpha crashed in shallow water within 100 yards of the shoreline. Both fliers lost their lives,

although the student Naval Aviator on board bailed out two seconds prior to impact but did not have sufficient altitude for parachute deployment. The aircraft was destroyed.

Bravo climbed to altitude where a wingman reported damage to the nose wheel well area. Controllability checks indicated that the aircraft could be flown, but the nose wheel would not extend so Bravo safely landed the T-34C gear up at a nearby airport.

Grampaw Pettibone says:

Gol dang it! When eight experienced instructors conduct an unscheduled, poorly briefed formation flight, trouble—in company with the Grim Reaper—is bound to be nearby. In this case, the combination was deadly. The lack of professionalism coupled with a paucity of respect for safety turned this mission into a tragedy. These instructors set a horrible example for students to follow.

Seahawk Smash-up

Two SH-60F *Seahawks* were on a flight to transport sea-air-land team (SEAL) personnel to a mountain landing zone (LZ) for insertion/extraction training. Before this flight, the lead pilot and the pilot of the second aircraft were scheduled to fly on board the same SH-60F. However, due to a logistics requirement, a change in crew resulted and the wingman pilot became pilot in command of the second aircraft, even though the wingman had not completed the necessary training for the mission. The CO approved the flight schedule change based on the wingman crew's completion of some previous SEAL insertion/extraction training.

In the preflight briefing, the lead pilot did not adequately discuss the intended wind determination procedures for the flight profile once over the LZ. The wingman pilot failed to question the inadequacies of the formation portion of the brief. Neither crew adequately predicted the density altitude of the LZ for the expected land time, and were thus unaware how much actual power was available for landing at the LZ. Prevailing winds were out of the west, yet the lead pilot perceived them to be out of the southwest.

On the way to the LZ, the wingman conducted a power check at an altitude lower than that of the LZ.

Upon arrival, the lead pilot still figured the winds from the west. Lead planned to land on the first pass over the LZ but waved off due to excessive ground speed—not fully realizing this was evidence of a tailwind on the approach. Lead failed to notify the wingman of the reason for waveoff.

On the second approach, lead flew an appropriate mountain approach and successfully landed in the LZ. However, due to the wingman's step-up position in the formation and a depression in the LZ along the flight path, the wingman lost translational lift while still flying out of ground effect. This loss of lift, while maneuvering to land, led to a situation in which power required exceeded power available. Consequently, tail rotor effectiveness was lost. The wingman aircraft went into an uncontrollable right yaw.

Despite performing loss-of-tail-rotor-drive emergency procedures, the SH-60F impacted the ground in a left drift, rolled over on its left side in a small gully north of the intended LZ, and caught fire. The crewman in the rear was wearing a gunner's belt which was adjusted so he could extend his torso out the port side of the fuselage to help clear the aircraft for normal landings. Because of an obstruction in the fuselage, he was unable to brace himself before impact, was propelled the length of the gunner's belt from the aircraft and ultimately pinned under the *Seahawk*. Despite efforts by SEALs and personnel from the other aircraft, the crewman perished in the crash.

Grampaw Pettibone says:

Holy hoverin' helos! This bad show started with a flight crew not qualified for the mission at hand and an incomplete, if not careless, brief. Wind direction didn't get much respect from these crews, either. Plus, Naval Air Training Operating Procedures Standardization says to make multiple passes over the LZ to determine the winds before landing, which wasn't done. On top of that, the crews didn't pay enough attention to the density altitude calculations, and the wingman didn't do the in-flight power check at a proper altitude to determine how much power would be needed at the LZ.

The crew's failure to identify and completely assess the hazards involved with this particular mission was followed by failing to apply the well established NATOPS control procedures that would minimize the inherent risks of mountain flying. One unprofessional event led to another. Result? We lost a precious life and one *Seahawk*. Nuff said.