

## Bad Bounce

The wingman in a flight of two F/A-18 *Hornets* which had just completed a 15-degree practice dive-bombing attack executed a 3.5 to 4.5 G pull-up. After establishing a positive rate of climb he began a left turn toward the prebriefed egress heading. In the turn he thought he had spotted the flight leader. He became fixated on acquiring visual contact in order to establish the briefed formation for departure from the target area.

While in the turn he was looking over his shoulder to the right. Unknowingly, he increased the *Hornet's* angle of bank to more than 90 degrees left wing down and tightened the turn, pulling nearly 6 Gs. He continued this way for six seconds. The aircraft descended



rapidly because of the over-bank situation.

Noticing that the wingman was nearing the ground, the flight leader transmitted three times, "Get your nose up!" The wingman responded

by looking forward, rolling wings level and pulling the control stick aft into his lap to prevent impacting the earth. His aircraft was actually in a 23-degree angle of descent at just under 500 feet when he initiated dive recovery.

The aircraft struck the ground with a relatively low rate of descent and pancaked into the air. The radome, radar antenna, centerline tank and multiple ejector rack were torn off the aircraft. Both generators dropped offline and the aft section of the *Hornet* became engulfed in flames.

"Eject, eject, eject," directed the flight leader, and the wingman ejected at 230 feet above ground level at 271 knots. He survived the emergency egress but sustained minor abrasions to his left hand



*LT. RICK O'SHAY MAKES A BIG MISTAKE...*

because he was not wearing flight gloves. His also received a facial laceration, likely caused by wind blast during the ejection catching a 1.5 square foot cloth attached to the parachute D-ring—an improper modification to aviation life support equipment—and pulling the ring up into the pilot's face. The aircraft was destroyed when it crashed.



**Grampaw Pettibone says:**

**Oh, woe is me! We're still doin' it after all these years. We're still forgettin' that above all else, especially in today's high-speed tactical environment, the pilot's first priority is flyin' the bird. The wingman in this case was more concerned about joinin' on the leader than safely clearing the terrain. He let the *Hornet* get away from him, so to speak. Also, it mighta helped if he exercised better "cockpit-to-cockpit" communication by callin' the leader and lettin' him know he didn't have visual contact. Corrections coulda been made to avoid the bad bounce.**

## Wild Winds

*LCdr. Howard M. Tillison, USNR (Ret.) was officer in charge of Helicopter Antisubmarine Squadron Light 30 Det A aboard USNS Harkness in 1982 during the incident he describes here. He now works at Air Test and Evaluation Squadron 9, NAWS China Lake, Calif.*

We were inbound in our HH-2D *Seasprite* to a promising landing zone (LZ) which was on a gently sloping coastal plane in the lee of a mountain range that rose from sea level to 3,000 feet within a couple of miles. Inbound to the LZ from the

ship at 1,500 feet we had a 25-knot head wind, shown by comparing our airspeed and doppler ground speed indications. When I reached a good spot to begin a straight-in landing approach to the LZ, I started a normal descent and began reducing airspeed from 100 to 70 knots for a straight-in to final. We were attempting to land as closely as possible to a road which ran along the base of the mountains at the spot where they began their upward thrust from the coastal plain.

I suddenly noticed that things didn't feel right. I looked down to



see a 1,500 feet per minute rate of descent on the vertical speed indicator. My ground speed was also increasing and the mountains were getting bigger all the time. In the space of about a mile, the wind had shifted 180 degrees and was now dead on the tail. Instead of a straight-in to the LZ, I ended up button-hooking around. I landed uneventfully, facing back toward the ocean.

After analyzing the situation, my copilot and I realized that the easterly tradewinds were spilling over the ridge and forming a rotor in the lee of the mountains, which resulted in both a downdraft during our approach and a 180-degree wind shift at ground level. Luckily, we

were lightly loaded, overpowered and had room to recover from a potentially hazardous situation by making a 180-degree turn prior to landing. If we had been heavy and failed to notice the wind shift prior to short final, we could just as easily have been in a settling-with-power, or power-settling (remember the tailwind) situation.

After that experience, we either had our ground party pop a smoke flare every time we approached an LZ in mountainous terrain, or we conducted a flyover at 1,500 feet and tossed out a roll of toilet paper to see what the winds were doing at ground level before commencing our approach.

Mountain flying is a different environment, even when the mountains are right there next to the friendly ocean and flat tropical beaches. Helo drivers should be aware of this potential problem before attempting to land on the lee side of a mountain and ending up with a tailwind instead of a head wind while trying to pull into a hover.

Gramps blamed the CH-53D *Sea Stallion* crew in "Lava Lament" (Sep-Oct 00) for failing

to "determine the wind direction," but it's not always apparent when the wind has shifted 180 degrees as it did with me and probably did to the CH-53D pilots that day, in a relatively small space. If a *Hornet* is on final to a carrier and the winds go out of limits, the air boss or the landing signal officer can wave it off. It ain't the same ball game when you're in a helo trying to make it into an LZ without the benefit of having somebody on the ground to put up a windsock before you arrive.



**Grampaw Pettibone says:**

**Welcome advice for rotary wing pilots.**