

I Almost **Hit** a Dolphin

By Capt. Michael J. Long, USMC

We had a quiet night for our two night-contact T-34 flights. The weather was clear, with unlimited visibility—good conditions for my student’s first VFR flight at night. He was in the front cockpit.

After a sunset takeoff, we climbed to altitude for high work. The student and I were getting adjusted to the night lights while we worked on turn patterns and level speed changes. After 30 minutes of high work, we went to an outlying field for a practice-precautionary-emergency landing (PPEL) to a low approach. The student was doing average for the flight, making typical mistakes for a student. He was thinking he was lower than he really was and getting slow because he started the landing transition too early.

We then flew to Corpus Christi International (CRP) for practice touch-and-go landings. We approached the airfield and asked for the break to enter the pattern for runway 17. Our request was denied because of a Coast

Guard HH-65A Dolphin helicopter in the pattern. CRP tower directed us to execute a straight-in to runway 17. In a previous life, I had flown helos, but I never had operated a fixed-wing aircraft in the same pattern with a helicopter.

We were on a one-mile final for runway 17, and we already had been cleared for a touch-and-go when, from the backseat, I saw two stationary white lights (the helicopter) a little upwind of the approach end of the runway. I contacted tower to confirm our clearance to land. No response. Shortly after my radio call, I saw the two lights moving forward. I didn’t call the tower again for clearance approval because we already had received it.



While I leveled the wings, I saw the helicopter pass down our right side. He still was in a hover at the approach end of the runway, and I was at eye level with his main rotor.

The first touch-and-go went smoothly. Then tower cleared us for left, closed traffic with the helicopter. We normally start our crosswind turn when our company traffic is abeam. I told the student to give the helicopter more space; I wasn't sure how fast he was or what his intentions were for his next approach. We let him get 45 degrees behind our wingtip before we turned.

As we rolled onto downwind, the helicopter approached the 180 position, which meant our spacing was adequate, or so I thought. I then realized the helo pilot was not talking on UHF, as we were. However, the tower controller was transmitting on both VHF and UHF, so I could hear when tower issued the helo

pilot clearance for the option. As I concentrated on my student's airwork and pattern, I also split time between my student and the helicopter, so I could see what he was doing.

At the 180 position, I again told my student to extend downwind a bit, because I still was uncertain what the helo pilot was going to do on the runway. Tower gave us clearance for our touch-and-go as the helicopter touched down on the runway. When I saw the helicopter touch down, I told my student to start his turn to the runway. I assumed the helo was doing a stop-and-go: The helo comes to a hover, touches down, picks back up into a hover, and then starts moving

forward again. At this point, I was concentrating more on the helo than my student.

From our position at the 90, I saw the helicopter pick up into a hover and appear to be on the go for take-off. I shifted my scan back inside the cockpit to concentrate on my student's basic airwork; we were getting lower to the ground with little room for error. Turning onto a long final, probably a half-mile, I looked to find the helicopter. From the backseat, I looked around my student's head but couldn't spot the helo. From the previous approach, I remembered seeing just two white lights on the helicopter—the lights blended in well with all the background lighting, runway and rabbit lights.

As we got closer to the runway, I came back inside to check on our airspeed. Then, as I looked up to see the runway, at about 25 feet of altitude, my student turned to the left at about 45 to 60 degrees AOB and added full power. I knew his sharp turn was because of the helicopter, but, at the time, I was staring at the ground as our left wing tip rapidly approached terra firma. I immediately grabbed the control stick and applied right aileron to level the wings.

While I leveled the wings, I saw the helicopter

pass down our right side. He still was in a hover at the approach end of the runway, and I was at eye level with his main rotor. I gave a big sigh of relief that we did not hit anything. I then called tower and said we were waving off and entering a left downwind for a full stop.

After shutting down at the FBO, I walked around the airplane and didn't see any damage. I later learned we had hit our left, wing-tip trailing edge on the runway and had bent the last five inches of the wing tip about 10 degrees. I walked in and called the tower supervisor, and we discussed what had happened.

A number of things could have been done to prevent this near-midair. We could have monitored VHF, as well as UHF, or asked what the helo pilot's plans were. We could have just moved over to runway 13 and avoided the situation all together. We could have executed a waveoff earlier when I didn't see the helicopter from the back seat on final. Finally, I could have communicated with the tower to verify the helo's position.

This incident was a real eye-opener to me about helicopters and fixed wing operating in the same touch-and-go pattern at night. 

Capt. Long flies with VT-27.

Who's Got the Traffic?

Air-traffic controllers can greatly improve aircrew's situational awareness (SA). The tower environment can be a very busy place where a loss of SA can lead to disaster. Consider the different scenarios that may be happening at the same time: GCA or TACAN traffic (on single-frequency approaches); field-carrier-landing-practice (FCLP) aircraft (usually on their own frequency); overhead or straight-in traffic on the normal tower frequency, VFR transition aircraft on VHF; and rotary-wing aircraft, at fixed-wing bases, flying their own VFR course rules.

With all that activity, it's understandable that aircrews do not have all the information required for good situational awareness. Aircrews may hear only one side of the conversation. They may have heard the controller call traffic, but they didn't hear the response from the other aircrew. Did the other aircrew have the traffic in sight?

Air traffic controllers can greatly improve aircrew's situational awareness by making sure they:

- Provide thorough traffic calls. Include not just what the traffic is now doing. Ask if he will be changing altitude or turning.
- Reiterate intervals as necessary.
- Resequence as the scenario requires. This is important not just to the aircraft coming off the deck but also to the one behind him. The trailing aircraft's interval may have been extended, and he has to look farther upwind, crosswind, or downwind for his interval. A typical call would be, "AA123, your interval is in a deep crosswind."
- Explain the situation as time permits. The controller may say, "AA123, continue upwind. I'll call your downwind. Turning overhead traffic inside you."
- Always remember, "Traffic for one is traffic for the other."

A controller who provides the complete picture greatly increases the aircrew's situational awareness, and enables our controller-pilot team to operate safely.—ACCS(AW/SW) Leslee McPherson, air traffic control analyst, Naval Safety Center.