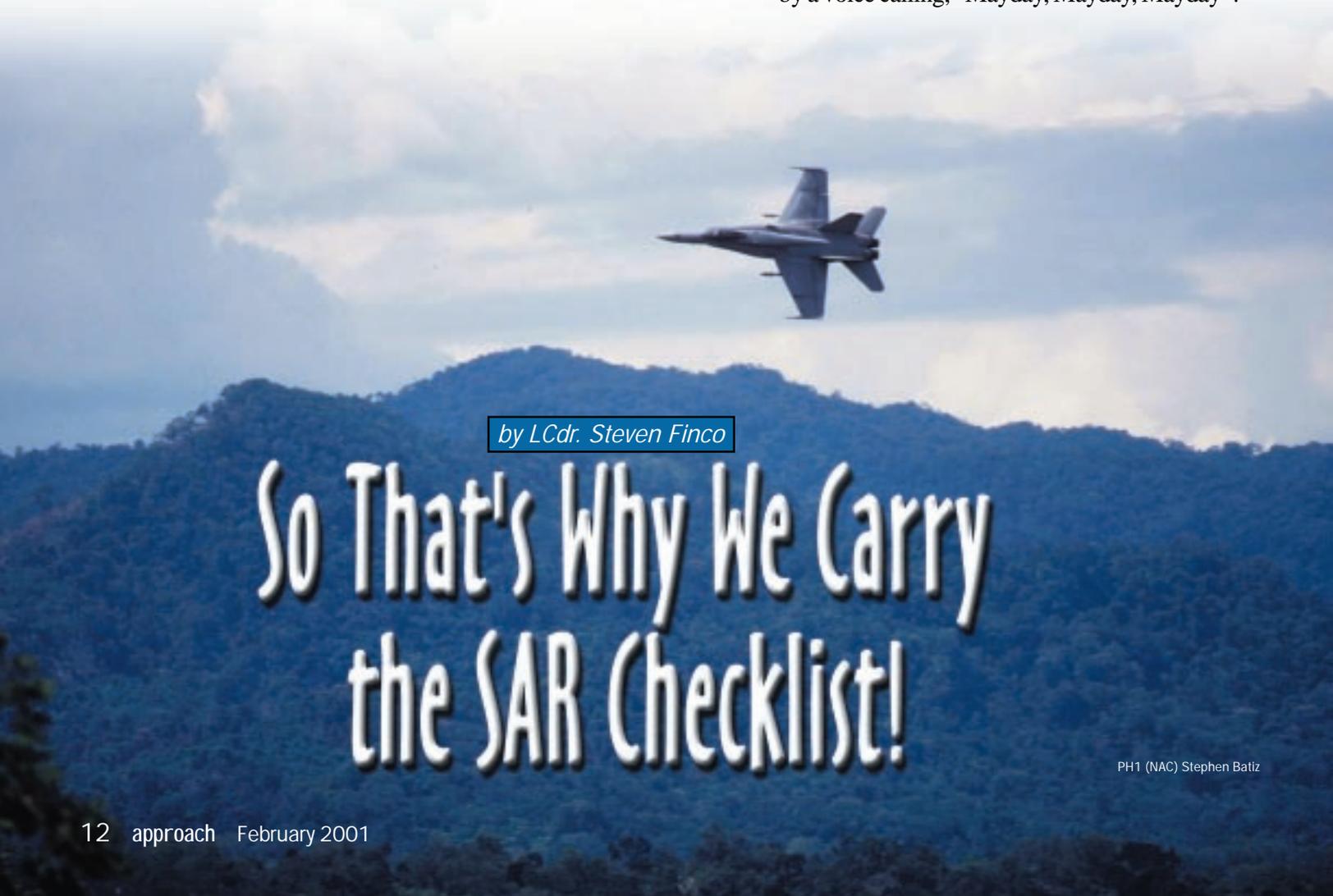


**T**alk about the unexpected. After a weekend in the heartland of America, I launched in my Hornet from a municipal airport in the Midwest late on a Sunday afternoon and headed back to the East Coast. Despite a few days away from maintenance, the only gripe was one of my two UHF radios was broken, not bad for a wood-burning Lot 10.

Chicago Center quickly cleared me to FL330, with direct routing to my destination. Eight minutes after brake release, I coupled the autopilot to home plate. Betty was giving me a smooth ride. Radalt reset, external fuel transferring, and cabin pressurization on the correct schedule, I even had 100 knots of tailwind! Another routine, extended navigation-training sortie. Suddenly, the OXY LOW caution illuminated. No problem, I had two liters, I was fat on gas, and only 1+00 until I'd be on deck. Time to sit back, change frequencies every 10 minutes and monitor Betty, while she monitored everything else. Thirty minutes into the flight, Cincinnati Center asked me if I was receiving a UHF emergency locator transmitter (ELT)

beacon. I deselected squelch on my Guard receiver, and I could hear a faint ELT beacon through the background static. I dropped an INS waypoint at my present position to anchor an ADF bearing to the ELT source and passed this information to Cincinnati Center. A quick check of the chart revealed an Air Force base along the bearing to the beacon. I was sure the source of the beacon was an Air Force aircraft sitting on the ramp after a "hard landing" following a poorly executed flare-to-land.

As I continued east at more than 600 knots, the ELT beacon became strong enough to break through the squelch setting of my radio. I was assaulted with the incessant "Whoop, whoop, whoop" of the ELT. My first reaction was to deselect the automatic guard-frequency-monitoring function of the ARC-182 radio to regain the peaceful quiet of a single-seat cockpit. But since I had time on my hands, I decided to plot another ADF bearing to the source of this irritating sound. Just as I selected the ADF function on the radio, the emergency beacon stopped and was replaced by a voice calling, "Mayday, Mayday, Mayday"!



*by LCdr. Steven Finco*

# So That's Why We Carry the SAR Checklist!

PH1 (NAC) Stephen Batiz

The person in distress was an Army sergeant who had been on land-navigation and survival training in the mountains of West Virginia. An unexpected, fast-moving snowstorm had moved into the area, and he was suffering from hypothermia and frostbite. He was lost, but had been issued a UHF air-band radio (like our PRC-90s) to use in an emergency.

I furiously searched my nav bag, trying to locate my SAR checklist. As I collected all the pertinent information on the survivor, his radio signal became weaker, and I soon lost radio contact. As I switched off of guard frequency back to Washington Center, the controller frantically called for me to contact the next ATC sector. I explained to him that I needed to turn around and fly a reciprocal course to reestablish communication with a soldier in distress. To my surprise, even though I was in class Alpha airspace, I was cleared to go anywhere I desired at my current altitude of FL 330. I also explained that I was single radio, and that I would be off his frequency and would monitor guard.

Slowing down to max-endurance airspeed, I flew west while making calls on guard, trying to find the frigid man in the tree-suit. I soon reestablished radio contact with him and set up an orbit at FL330, where the radio signal was the strongest.

While directing the survivor to switch to the SAR common frequency of 282.8, the local Flight Service Station (FSS) attendant in Elkins, West Va., contacted me on guard. He had been monitoring my transmissions and believed the survivor was a member of the local Army base. As the FSS attendant called the Army base, I calculated my bingo fuel to reach my original destination. I also started looking for a local divert field, in case I had to remain on-station throughout the rescue effort.

Elkins FSS was able to coordinate with the Army command post to have the land-navigation instructor (callsign "Muz") in the field come up SAR common frequency. By the sound of Muz's voice, he wasn't happy that a Navy aircraft was needed to help find one of his lost pups.

Because of UHF line-of-sight problems on the ground, I was acting as the comm relay between the survivor and the rescuers. I received updates from Elkins FSS on when an Army SAR helo would arrive, and kept Washington Center advised. I felt like a switchboard operator.

With five minutes of on-station fuel and only 20 minutes of daylight remaining, I was resigned to changing my destination to a local divert so I could remain airborne as long as possible. It seemed a small concession to make in order to provide a wayward soldier with a warm bed for the night. Fortunately, Muz soon passed that they had located the survivor.

I switched to Washington Center and got clearance at FL410 direct to my destination. Passing FL390 in the climb, I was putting away my charts when I noticed the OXY LOW caution again. With less than one liter of oxygen remaining, I wouldn't be able to fly the most fuel-efficient profile to my destination.

My bingo-fuel calculations were predicated on 100 knots of tailwind and fuel-burn rates at FL410. I was still getting good oxygen flow, but since I was not sure how long it would last, I got clearance to FL230 and started a fuel-conserving descent. If the LOX bottle went completely empty, I planned to execute a rapid descent.

The winds were favorable at FL230, and 40 miles from the field, I started my idle descent, penetrating a thick undercast at 17,000 feet. Passing 9,000 feet, I was in the clear, but, since it was 10 minutes past sunset, it was rapidly getting dark. I received radar vectors to the visual straight-in, and at 10 miles, I contacted the tower only to be informed that they could not get the field lights to come on. Rest assured, they said—public works was working the problem.

I was cleared to land at my own risk, and the Fresnel lens was still operating. My fuel at touchdown was 50 pounds below day SOP minimums and well below night minimums.

This seemingly routine flight had quickly turned into a high-task SAR mission. Coordinating the SAR effort with four separate units on three frequencies with only one operable radio was demanding. Rule number one for the on-scene commander of a SAR effort: Never put yourself in extremis. My bingo fuel figures were calculated using an optimum flight profile, but in all the excitement, I failed to consider the ramifications of the OXY LOW condition.

In the future, I won't be so spring-loaded to deselect guard when receiving an ELT beacon! 

LCdr. Finco flies with VFA-86.