



FLYING on **Stem-Battery Power**

By Lt. David Kneeland

To be honest with you, I never imagined that I would be writing an article for *Approach* magazine. Besides, most of the articles you've received are from salty aviators and being a fresh nugget out on cruise, I am about as green as the flight suits that we wear.

We had left Hong Kong to transit through the South China Sea. I was scheduled for a day blue-water-ops hop as Dash 2 in a three plane. The lead aircraft was the skipper, and Dash 3 was DCAG. Our mission was to provide red air for a pilot getting his level 4 signoff.

As I walked to the jet, I saw thunderstorms to the west. Our rendezvous location was 160 miles away but was directly behind a thunderstorm cell. As we launched and found our way around the

Photo by PH3 H. Dwain Willis



cells, I got a right generator-caution light. After going through the NATOPS procedures, I told the skipper I planned to head back to the boat and to hold overhead until they returned.

En route to the ship, I had to dodge thunderstorms and clouds. I checked in with red crown and strike, then passed the codes to maintenance for a bad right generator. The caution light had been on for about 10 minutes, which is no big deal in the Hornet, since one generator easily can power the entire electrical system.

At 30 miles from the ship, I checked in with marshal and called inbound. I would be holding overhead at 18,000 feet. I proceeded inbound at 5,000 feet to get under the thunderstorms. At 20 miles, the plane got quiet, real quiet. I looked at my HUD, my two digital displays, and my multi-purpose map—all were blank. I realized the only thing operating in the cockpit was an amber-caution light, a batt-SW-caution light, and that was it. I quickly took off the oxygen mask because, in the Hornet, the OBOGS system shuts down when operating only on battery power.

As I looked down at the engine display to confirm the engines still were running, I saw the integrated-fuel-engine indicator (IFEI) still indicated engine rpm and EGT. I felt a sense of relief, knowing the engines were running and the jet was flying fine for the moment.

At that instant, I realized I had experienced an unusual double generator failure. I went through the appropriate steps, except for the emergency oxygen, because I was at 5,000 feet. I mustered to get a calm, cool voice as I called marshal to talk to a Hornet rep. Marshal had me contact my rep on button 17. No displays were in the radio, so I rotated the control knob to what I thought was button 17. As I called for my rep, with increasing enthusiasm, marshal answered, “Fist 400, you’re still up marshal.” I would be single frequency, with only one radio. I told marshal I needed to contact the rep on their frequency.

As I waited for the rep, I realized all my navigation aids were gone. At 20 miles, at 5,000 feet, and dodging thunderstorms, I kept my present heading, hoping to see the boat. I descended several thousand feet to stay VFR

and to continue the search. Finally, at 10 miles, I saw what appeared to be a wake. At six miles, I made visual contact with mom. My rep came up on marshal, and we thoroughly discussed the emergency. He asked for my indications in the cockpit—a short list I might add—and, most importantly, what my battery power indicated.

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As the rep and I came up with a plan, the air boss told me to recover at the end of the cycle, which still was 30 minutes away. As I listened to the air boss, I thought, “Are you crazy, 30 minutes on battery power?”

After taking a deep breath, I politely radioed to the air boss, “Sir, NATOPS suggests to land as soon as possible.”

After further discussion of my situation among the air boss, the rep, and myself, the deck quickly started an emergency-pull forward. I watched overhead at 2,000 feet. From that moment forward, all radio calls were answered by mike clicks to conserve my depleted battery. It had been roughly 15 minutes since the double generator failure.

After several minutes, the air boss reported the deck was open, and CAG paddles was on-station waiting for me to come aboard. Paddles told me to set up for a six-mile straight-in and to report when I was inbound. I acknowledged with a mike click and laughed to myself, “Six miles. I have no idea where six miles is located. Doesn’t he understand my navigation system is completely gone?”

As I started downwind, I pulled the emergency-oxygen green ring, lowered the flaps to full, and emergency extended the landing gear. In the cockpit, I had a good indication all three gear were down and locked. The problem I now faced was that I had no idea what my exact landing weight would be because the portion on the IFEI where the fuel is displayed was gone.

I had a rough idea I was hovering around 35,000 to 36,000 pounds. The maximum arrestment weight for the Hornet is 34,000 pounds. As I turned to set up at that “six-mile” straight-in point, I started to dump fuel. The Hornet dumps between 600 to 1,000 pounds a minute, so I turned the dumps on and timed for two minutes. I was close to the three-mile mark when CAG paddles called, “Paddles contact.” It was time to focus on landing.

While I adjusted my fuel, I thought of several things: “What if I bolter?” “What if I go into mech before I land?” “I wonder what it’s going to feel like if I have to punch out?” As these thoughts ran rampant through my mind, I told myself, “Just fall back on your training, and you’ll do just fine—I hope.”

At two miles, I trimmed the jet to what I thought was on-speed; I didn’t have any indications in the cockpit. I trimmed the jet to 145 knots, on-speed for the Hornet, and continued to scan my standby instruments. I scanned airspeed, altitude, then lineup. Finally, at a mile and a half, CAG paddles lip-locked me, and, after several informative calls, he talked me down for the uneventful day trap. That trap was one I never will forget. Had I not trapped, I might have found out the answer to one of my questions.

In closing, from one LSO to another, “Thanks paddles, I owe you one.” 🦅

Lt. Kneeland flies with VFA-25.



Re: “Wet and Wild in San Diego Bay” (April 2003)

As a rescue swimmer and SAR petty officer in my unit in San Diego, I am concerned about the search-and-rescue story “Wet and Wild in San Diego Bay,” in the April 2003 *Approach*. The events in this story are more wrong than the pilot explained.

He did not seem to be concerned with the fact they were training with “*for training use only*” gear. All the gear from aviation physiology in Miramar, San Diego, is not suitable for flight. In the article, the individuals were free-floating, in an ocean environment, in training gear. What concerns me even more is that the pilot states he was hoisted “up to the cabin” via litter. OPNAVINST 3130.6C limits live hoisting for

training to a height above the water of no more than 10 feet. The litter then will be lowered back to the water, and the survivor released. The poor proficiency of the rescue swimmer (rigging the litter so it flipped over) explains why we have those rules. The possibility of drowning someone is very real—that’s why we have pool training.

I’m writing because I do not want other Navy SAR units to get the impression it’s OK to wear training gear for actual evolutions and to do full live hoists by litter as part of a mishap drill. It is not.

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