

Here's a good Emergency Procedure (EP) scenario involving a Navy Lt and former cadet (Alain Garcia - Spaatz #1223). A fine example of how to handle an EP.

Remember--

- Maintain aircraft control
- Analyze the situation
- Take proper action

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Hanging On by Some Bolts

By LCdr. Steve Blasch

I was a calm and clear night in the North Arabian Sea, and we had been on station a month, supporting Operation Southern Watch. After a few days of bad weather, including a sandstorm at sea, the absence of haze and clear visibility was a welcome sight. We anticipated a smooth night of SSC and recovery tanking -- we thought.

My trusty pilot and I briefed and completed our preflight routine before walking. We went up to the flight deck and awaited our Hoover to do the old hot switch. After the normal pleasantries of greeting the offgoing crew, we got the passdown on the aircraft status -- it was an up aircraft. We settled in, completed our checks, and taxied to the catapult-tension, run-up, wipeout and lights on.

Off we went into the night, climbing to our tanker altitude. The airspace was busy, as another one of our brethren already was checking their refueling store. We started a slow rendezvous.

Just as we were about to join up, we heard a "thud," followed by a moderate rumbling sound, which lasted until the end of the flight. After a "Holy #*^@!" from each of us, we immediately assessed flight controllability, which was good. We then checked the engine instruments and flight controls; they were normal.

We tried to figure out why the aircraft was making abnormal noises, with normal cockpit indications. We figured something had flown off the aircraft, or one of the engines was vibrating. We reduced the left engine throttle -- step one of our engine-vibrations-emergency procedure. No change, the jet still was rumbling at a level of about half the noise of open bomb-bay doors. OK, on to test the No. 2 engine -- same result. The engines were normal, so what next?

Tell them what they have won, Bob: "a No. 1 engine-fire light, Johnny!"

As the fire light came on, the wafer-thin cushions of our Escapac 01 ejection seat were sucked up. We waited "one potato" in the cockpit to make sure we had no fast hands turning switches, and we started to execute our engine-fire emergency procedures.

With Jackie Chan-like reflexes, I guarded the No. 2 throttle. "No. 2 throttle guarded," I chimed in to the pilot.

He responded, "No. 1 throttle coming off."

During this exchange, I started the auxiliary-power unit (APU).

We took a breather and reaffirmed we still were flying. We were 1,000 feet below the tanker-checkout altitude, and we agreed to descend another 1,000 feet for separation. We also agreed to complete our checklists before we called the outside world and started a communication circus. Because the launch just had started, we knew we had plenty of time until the recovery began. From this point on, the flight seemed like an emergency-procedures trainer at the FRS. We completed all the checklists, down to lowering the gear and flaps.

We were ready to communicate with the outside world, so we called our representative in CATC. We passed our situation: "Single engine with No. 2 running, both hydraulic systems operational, checklists complete, will need a tow out of the wires and a manual wing fold."

Before we recovered on board, we discussed all the possible contingencies and flight characteristics associated with a single-engine arrestment.

Ready to come in for our trap, we set up at a "gentleman's" distance of 10 miles and followed the tractor beam in to the boat -- roger ball. My pilot made his first single-engine landing at the boat (he told me afterward). We found out we had not discussed one thing: We would track left in the landing area because of asymmetric thrust.

Now that we were safe on deck, we could unravel the mystery of what went wrong with the aircraft. We exited and joined the crowd around the No. 1 engine. To our surprise, the entire aft section of the engine tailcone had broken off and was hanging in the breeze. It was held on by just three of the more than 30 bolts that secured it to the aft end of the engine.

The first lesson learned was always keep flying. After we heard the thud, we immediately scanned our flight and engine instruments to make sure we still were flying. We thought about having a wingman join but initially decided to descend and get separation from everyone.

Believe your cockpit indications unless you can prove otherwise. With no indications of a problem from our flight or engine instruments, we were very perplexed. We found ourselves almost hoping for something else to go wrong so we could get a clearer indication of the problem. We got what we hoped for when we saw a fire light, caused by one of the two warning elements in the breaking tailcone. This signal confirmed something was amiss with the No. 1 engine.

If time permits, take care of your emergency before communicating the problem to the outside world. Waiting to communicate probably was the major reason everything went smoothly. We gave ourselves plenty of time to assess the situation and to step through all the emergency procedures. We elected to call our representative with our ducks-in-a-row, which enabled us to give our best assessment, and it kept us ahead of the jet.

Take seriously your emergency-procedure training. As a senior Hoover guy, I had gotten no slack from the simulator instructors when I completed my refresher syllabus before this tour. A challenging training program is what every aviator should strive for, and I'm here to tell you it certainly paid off. After the initial assessment of our problem, the training took over, and our actions seemed natural. Next time you go through your EP trainer, have the instructor shake it up a bit, no matter how senior you are. Thanks to a solid pilot and dedicated training instructors, this story had a happy ending.

LCdr. Blasch and Lt. Alain Garcia (also on this flight) fly with VS-21.