

Crew Resource Management

Situational Awareness
Assertiveness
Decision Making
Communication
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Mission Analysis



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Batter Up!

By LCdr. John W. Hewitt

This article is not about baseball. In fact, nothing closely resembling baseball is in this article. But the best word to encapsulate what our crew experienced during a recent spring day in Southern California, is a baseball “strike.” As you read on, you will see that our E-2 crew went well beyond strike three, and we still were at bat—not a very comfortable feeling. Batter up!

Our flight off the boat during a recent TSTA (tailored-ships-training availability) started well enough. Our Hawkeye crew was scheduled as a triple cycle to control two sections of Hornets for AIC (air-intercept control) on the first event, drop into Point Mugu for a parts run on the second event, and then conduct more AIC on the third event. The flight was a little out of the ordinary, given the stop in Point Mugu. We saw this event as a chance to get off the boat for a few hours.

The first strike against us occurred soon after the cat stroke, when the pilot tried to raise the gear. The master caution illuminated, with an associated tow-link light. Our aircraft had a history of a stuck tow-link microswitch, which, if stuck, gives a false indication of tow-link and/or nosewheel position. We spoke to our rep, inspected the nose gear and tow-link through a small window above the wheelwell, and saw they were straight and retracted. We concluded this problem was yet another stuck microswitch, so we raised the gear, saw the tow-link light extinguish, and then proceeded on our mission. Strike one.

The first event progressed rather smoothly. The AIC was good, the aircraft seemed to be operating normally, and our timing was working out very nicely to stop in Point Mugu. Our pilots positioned the aircraft so that, as soon as we finished our AIC, we were



Photo by PH3 Dusty Howell

overhead Point Mugu. We were on deck within five minutes. However, on the rollout, both EPC (electronic-prop control)-fail lights illuminated. The E-2C NATOPS states that reverse thrust during this condition may not be available, and it further states a go-around should be flown, followed by a field arrestment.

The thought of having to call the boat and explain to the front office we were stuck at home field (with our families) for who knew how long, and having them believe us, crossed my mind. It would be mildly painful to substantiate that bit of misfortune to the CO but definitely worth it.

However, there would be no such good deal. Although we had EPC-fail lights, both prop-beta lights (indications that reverse thrust is available) illuminated. Our pilot gently eased the power levers into the ground range and, much to our relief, found that reverse thrust on both props was available. We recovered uneventfully, but that situation still was strike two. Sorry, hon, see you in a few weeks.

A maintenance technician reset the EPC code that generated the EPC-fail light, and the aircraft again was safe to fly. We received the part we came for and were airborne within 20 minutes of when we had landed. We conducted our AIC mission on the last of our three events and then headed to marshal for another good deal, Case III recovery.

On our first approach, we dumped fuel to about 500

pounds above our max-trap weight; however, we had to remarshall because of an aircraft bolter—no big deal. On our second approach, another aircraft boltered ahead of us, and we again were told to discontinue our approach. We now were about 500 pounds above our 100-mile bingo: just enough fuel for one more Case III approach. As fate would have it, on our third approach, our pilot boltered. On the ball, we were about 200 pounds above the bingo the marshal controller called for us. We were surprised to hear we were bingo to the beach for gas, considering we were the last plane to recover. Also, the weather at the boat was not only better than Case III; it was Case I.

We were not going to argue the call and, very begrudgingly, headed to North Island on bingo profile. Our pilot was angry at himself for boltering, and he kept apologizing to the crew. We told him not to worry and tried to encourage him; the mission was not over, and we still needed his “A” game to bring us back to the boat. Somewhere in this last paragraph was strike three—you decide.

On our bingo profile, SOCAL approach tried to put us on a stereo route into NAS North Island (NASNI). We emphatically explained to our controller our nearly perilous fuel situation, but to no avail; they kept putting us on the stereo route. We gained their attention by squawking 7700 and declaring an emergency for low fuel. Thereafter, we received the handling we deserved. Strike four.



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Strike five followed closely behind strike four. Just before landing at NASNI, our low-fuel lights illuminated. The low-fuel lights did not come as a surprise or cause too much concern because our crew had briefed and anticipated the possibility. But, momentarily, the lights would be a concern. On rollout, both pilot and copilot did not have illuminated beta lights (which possibly meant no reverse thrust).

Given our low-fuel state, the pilot, instead of taking the aircraft around for a short-field arrestment as NATOPS recommends, elected to lower the arresting hook and take a long-field arrestment. However, as we headed toward the arresting gear with our hook down and waiting for the impending tug, the beta lights for both props miraculously illuminated. Our pilot slowly tested for reverse thrust and again found it available; the hook was raised, and the aircraft was stopped. The crash crew had us hold on the runway while they performed a hot-brake inspection. The brakes checked fine, and we told NASNI tower the emergency was over, and no further assistance was needed. Strike five.

At NASNI, we got gas and had the good folks at VRC-30 perform a tailhook inspection; we had dragged the hook on the runway for nearly 2,000 feet. The Providers had given us the all-clear, and we got word from the boat to recover during the next scheduled recovery.

By now, our crew of five had been in the aircraft for more than seven hours, had dealt with at least five emergencies, and was ready to just bring the aircraft back to the ship. We wanted to just park it and put this

day in the rearview mirror. We were pretty much spent; adrenaline and morale were low, and fatigue was setting in. However, fate was not yet done with our crew: We still were at bat, swinging away.

Strike six came when we launched out of NASNI. When our pilot went to raise the gear, the same tow-link issue we had dealt with at the beginning of this dreadful flight now reared its ugly head again. Yes, we received another tow-link light. Certain this situation was a serial gripe and confident the tow-link was in the raised position, we erred on the side of caution and kept the gear down during our transit to the boat. We wanted to talk to our rep. We determined, as a crew, if the tow-link was down and/or if the nosewheel was cocked, we would bring our chariot back to Point Mugu and call it a day. To respond to this particular emergency aboard the ship is not only painful for the flight-deck crew (two of the four cross-deck pendants may have to be stripped), it is very dangerous for the aircraft and crew.

Once within comm range of the boat, we discussed the emergency with our rep. We concluded the problem was within the microswitch. We again inspected the nose gear, saw that it was straight, that the tow-link was raised, and then we retracted the gear. The illuminated tow-link light went out. Strike six.

The boat was Case III; we copied our marshal instructions and proceeded to marshal. As the routine, the E-2 is the last to recover. This time would be no different, except the ship had us commence too early. Our first time down the chute we were told to dis-

continue our approach and to remarshall; an inordinate number of aircraft ahead of us were boltering. Remarshaling was very frustrating for the crew but even more so for our pilot at the controls: He was now eight plus hours at the controls on our other-than-routine flight. Eight hours in the Hummer is bad enough, but eight hours punctuated with numerous emergencies almost was too much. Nevertheless, it was understandable; we all gritted our teeth and went back to marshal, not saying a word to one another.

The final strike came when the marshal controller told us to recommence our approach. The aircraft in front of us was being vectored to the final bearing off a bolter, and we were certain the ship could not possibly screw up the timing and spacing on this one—we were wrong. As we listened to the controller call off the DME for the aircraft in front of us, we compared it to our own. All five of us quickly determined there was no way we could trap right behind this guy—we were eating up the distance between us.

While never deviating too far from the final bearing, our pilot went dirty early. He made a number of S turns in an attempt to build some distance between us and the aircraft in front of us. This maneuver was to no avail because our approach controller soon told us to discontinue our approach and perform a 360-degree turn—in IMC, at 1,200 feet—to build separation. Every E-2 aviator who has experienced the Hummer dance probably accurately can surmise some to the language that was exchanged among our crew. Remember, this was the fourth time on this flight that our aircraft had been remarshaled, and it our sixth Case III approach. Mustering his last amount of motivation, concentration and focus, our pilot flew the approach to the ship, and,

finally, we trapped. At last, we were aboard and now could put this eight-and-a-half-hour flight from hell behind us.

You might say to yourself, “Well, nothing happened. What’s the point of this article? Is this one of those safety articles where nothing happened and was written just to score points with the skipper?” My crew and I do not believe so. We learned many lessons from this flight. Allow me to share the biggest take-away: crew-resource management (CRM).

This flight taught our crew the absolute necessity for good, if not excellent, CRM. While CRM always is a critical element of every flight, it seemed even more essential on this one. Just about any naval aviator can handle one, two, or even three emergencies in stride. But, dealing with five separate emergencies in the space of eight hours, compounded by the near round-robin excursion of Southern California, punctuated by remarshaling four times, and flying six Case III approaches was enough to test any crew. What kept us together as a crew was the use of good CRM and the motivation to bring the aircraft back to the ship.

Finally, something not specifically addressed under the seven pillars of CRM is crew morale. During our flight, crew morale hit some highs, but it hit even more lows. During those times of low morale, each of us was mindful of how we interacted as a crew, so we wouldn’t bring down morale even further. We encouraged one another, especially our pilot. We communicated only essential information over the ICS during critical phases of the flight. We also tried to convey to one another a spirit of optimism and the goal of successfully completing our mission. 🦅

LCdr. Hewitt flies with VAW-112.

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