

# COMMAND DECISIONS

---

CHRONICLE BY **JAMES ALBRIGHT**

---

**IN 1990, I WAS FLYING** an Air Force Boeing 747, designated an E-4B, flying what was known at the time as a “Command and Control” mission. The airplane was a fairly standard Boeing 747 with additional plumbing to receive air-to-air fuel from a tanker and additional electronics to reach out and touch just about anyone in the world. We had a cockpit crew of four, a communications crew of ten or so, a security team, three crew chiefs and one or two flight attendants. Our day-to-day job was, we all understood, of the highest national importance. Of course, that had nothing to do with me; my job was flying the airplane and leading the crew. The passengers downstairs were in charge of all that national importance.



---

## ABOUT THE AUTHOR

Captain James Albright is a Gulfstream G450 chief pilot and webmaster of Code7700.com, an aviation web resource with a worldwide following. He was an Air Force pilot for twenty years, having flown a variety of aircraft and holding positions as instructor pilot, chief flight examiner, and squadron commander. After retiring as a lieutenant colonel he has flown as captain and check airman for various multinational corporations, charter operators, and private companies.

---

## AIRCRAFT FLOWN

Cessna T-37B  
Northrop T-38A  
Boeing KC-135A  
Boeing 707 (EC-135J)  
Boeing 747-200 (E-4B)  
Canadair CL-604  
Gulfstream III (C-20A/B/C)  
Gulfstream IV  
Gulfstream V  
Gulfstream 450





A Boeing E-4B at Bogotá Airport in Colombia resting under overcast skies.

PHOTO: TECH SGT. JERRY MORRISON

**AS THE PILOT IN COMMAND**, what we called the aircraft commander, I had total authority when it came to safety of flight. The passengers controlled the mission and could dictate our timing, our destination, just about everything we did. But, if I thought that something they asked for would compromise our safety, I had veto power. But we aircraft commanders hardly ever did that. It was a part of our honor code to complete the mission. Good pilots could overcome just about any obstacle on the way to mission accomplishment.

Mission, from the squadron's point of view, also included training. I had with me a recently qualified copilot and it was my job to show him how it was done, by the book. The book, our squadron book, emphasized safety first, but the mission was a very close second.

We tended to be just as cautious and as safety-minded as any civilian outfit, perhaps more so because of the visibility of the airplane. Our standard operating procedures were patterned off the airlines and we certainly trained to a very high standard because some of the things we were tasked with doing were, shall we say, challenging. That's where I found myself one

afternoon, taking off into the worst weather I had ever seen as a pilot. I thought about telling the passengers we needed to wait a few hours to let the worst of the weather pass, but that would not have got the mission done on time. "Are we all okay with this?" I asked the flight crew. "You bet," they said as one. So it was gear up, flaps up, and keep an eye on the radar.

As is true in the civilian world, aviation managers lay down standard operating procedures based on experience and recent mishaps. One day, cockpit automation is your friend; the next, it is an evil that erodes pilot stick-and-rudder skills. We were in a phase of the latter emphasis and our squadron mandated that we hand-fly the airplane from takeoff to level off, so that's what I was doing. The Boeing 747, despite its size, is a very nimble aircraft. We tended to fly with the armrests down so we could control the roll with our wrists only. Pilots new to the seven-four tended to over-control the ailerons and that could be stomach churning in the cabin. Even with the turbulence, I was mindful of the ailerons while keeping a firm hand with the pitch. It was very turbulent, so I was "heads down," my eyes glued to the attitude indicator and doing everything I could do to keep the airplane right side up.





The Boeing E-4B Nightwatch flying over Central U.S.

PHOTO: STAFF SGT. MICHAEL HAGGERTY

We were in the clear, dodging the green, yellow, and red shapes on the radar. Our maximum takeoff weight was 800,000 pounds but, today, we were well under that, just under 700,000. Each engine produces over 50,000 pounds of thrust, so the airplane managed to peg the vertical velocity indicator now and then, today besting 4,000 feet per minute. The copilot was “heads up,” as he should have been, keeping an eye out for other traffic and doing his best to validate the navigator’s radar interpretation of the mess we were in. The engineer was sitting between us, his hands on the throttles and eyes on the engine gauges. Our autothrottles were good for approach and landing, but not available for takeoff and climb. The navigator faced backward in the cockpit, eyes glued to a radarscope.

“Need twenty right,” said the nav over the interphone. The copilot asked departure control and moved my heading bug when our request was approved. I dipped the right wing down and tried to average out the turbulence to keep the bank under control. In my peripheral vision, I noted the copilot was doing a good job of dividing his attention between the flight instruments and the view outside. What some pilots call “see and avoid,” others called “lookout doctrine.” I made a mental note for the copilot’s grade book; his lookout doctrine was excellent.

As I resumed my focus on the attitude indicator, the entire cockpit was illuminated with a bright flash. Just a millisecond later, there was a loud bang and then there was silence. I knew immediately we had been hit by lightning.

“I’m blind, I’m blind, I’m blind!” yelled the copilot, almost incoherently, but it was plain he was in full panic.

“I’m blind!” the flight engineer cried out too.

“Can anybody up there see?” asked the navigator, with just a little less hysteria.

“Relax, everyone,” I said, in the contrived voice of composure many of us pilots practice in our sleep. “I can see and we are still flying.”

I thought for a few seconds and realized I was flying solo in terrible weather, I may have had two injured cockpit crewmembers, and most of my attention was spent keeping the shiny side of the airplane up. I reached over and engaged the autopilot.

“Nav,” I said over the interphone, “take over the ATC radio; keep an eye on the weather.”

The copilot and engineer both reported that the burning sensation in their eyes was subsiding and they could again see. In another ten thousand feet of climb, the weather was below and behind us, so I disengaged the autopilot and resumed hand-flying until we leveled off.

The flight engineer did an inventory of the electrical systems we had lost and reported we could get them all repaired at our





PHOTO: LANCE CHEUNG

- What some pilots call 'see and avoid,' others call 'lookout doctrine.' -

destination, but it might be wiser to abort the mission and head home instead. We were flying from one classified location to another and, as luck would have it, our home base was just about at the midpoint. It was obvious what he wanted to do, but he didn't get to make that decision. The copilot apologized for "losing it" and said he was okay to press on. The navigator said nothing.

I sat and thought for a while. I had already violated one squadron standard operating procedure by using the autopilot during the climb, but that had been a wise decision. Now I had to make another, more important, command decision.

I announced to the crew that we would press on. There was more silence. Crewmembers, even military crewmembers, are taught to voice strong objections when they have them, but the aircraft commander makes the decisions for the crew. I decided that maybe a stroll downstairs was in order, to show the rest of the crew that their pilot was not at all fazed by this excitement.

I must admit that, as I unstrapped, I was feeling rather full of myself. There we were, in terrible weather, the airplane hit by lightning, and pandemonium all about. And yet I remained fully composed, flying the airplane. Yes, quite the stud.

As I got ready to exit the cockpit, the navigator pulled me to the side and said something that I will never forget. I've heard these words since, but this was the first time, and I think of it whenever something like this happens.

The navigator said, "When all about you have lost their heads and you remain calm, perhaps you don't understand the problem."

That stopped me dead in my tracks. I turned to look at all the red and amber lights on the engineer's panel and realized, for the first time that day, that perhaps I didn't understand the problem.

We aborted the mission and flew home. Once on the ground, we saw the black, burn marks on our airplane's pretty, white and blue nose, where the lightning had hit, squarely just below the post between the two pilots' windshields. On the tail, where the lightning had left, there was a hole on the horizontal stabilizer, about 2 feet in diameter.

As I made the long, lonely walk back to the squadron, I reflected on my decision-making that day. It was a military mission, yes. But even a mission of "national importance" can wait when the command decision to press on or abort can affect the safety of all on board. I made the turn into the mission ready room, where the navigator had an audience enthralled with every detail of the lightning, the terror, and yes, the steely-eyed aircraft commander. I thought the less said about it, the better, and hoped the story would die a quiet death. And so it has, but the lesson lives on. I think of it every time the radar turns red or we pull out the emergency procedures section of the flight manual. *-JA*