

On November 12, 1980, I was flying the F-4E Phantom from Zaragosa AB, Spain as part of a training deployment from our home base at Ramstein AB, Germany. On this day, I was the number two aircraft in a flight of four leaving from Zaragosa to practice our bombing skills on the Bardenas Artillery Range that was about 40 miles northwest of Zaragosa. We were the first flight to fly that day, a fact that becomes significant later. Our aircraft was tail number 68-0491, the 68 indicating that the plane was built in 1968, 12 years earlier.

After pilot training at Williams AFB near Phoenix, Arizona, I had been selected to remain there as an instructor pilot in the T-37 jet trainer. I flew as an instructor for three years and in 1978 got a new assignment, putting me in my dream jet, the Phantom. After three months of fighter lead-in training in the AT-38 at Holloman AFB, New Mexico, I moved to Tampa, Florida to take six months training in the F-4D at Eglin AFB. These six months gave us the bare basics on flying the aircraft and some instruction in using the weapons that we normally carried. But it was up to the first base of assignment, in my case Ramstein AB, to train us to become skilled in the missions of the aircraft. In the summer of 1979, I was moved to Ramstein AB to begin my mission training in earnest. By November 1980, I had 18 months of flying the F-4, about 270 hours flight time in the F-4 and 1500 total hours flying jets.

In the aircraft with me on November 12, 1980 was Capt Jim McCormick, a weapons system officer (WSO) who had more experience in the F-4E than I did. Jim had moved to Ramstein AB earlier in the year from Torrejon AB in Madrid, Spain, so flying in Spain was like “flying at home” for him. The flight leader that day was an experienced instructor, Donny Bean, and his WSO was Eddie Mallo, a junior WSO who had grown up in the Philippines. I had known Eddie several years earlier when I had been an instructor pilot and Eddie had become a student of mine. He had not completed pilot training and went on to become a navigator and WSO in the F-4E.

I don't remember a lot about the early portions of the flight that day. We flew one of several low altitude routes to arrive at the bombing range. Once there we practiced the standard profile, low level bomb pass across the target three times, then 2 passes each of dive bombing at the target from 10- and 20-degree dive angles. These would normally be followed by two strafing passes, shooting our 20 mm gun at parachutes mounted on telephone poles.

The rest of this story will describe the most serious event to ever happen in my flying career. We experienced a mechanical problem that led to our ejection from the aircraft.

After leaving the bombing range, I looked for our flight leader who should have been one – two miles in front of us. I spotted him and accelerated to gain airspeed so I could join on his right wing. From there he would lead us back to Zaragosa. While joining on him, the two trailing aircraft from our flight would also be joining on each other and probably remain behind us for most of the flight home.

As I neared our leader, I noticed a red light flashing at me from the dash panel. This panel in the front of our cockpit contained our flight and engine instruments, gauges that fed us information about the condition of our aircraft and our flight airspeed, altitude, etc. The red light was the Master Caution Light, a warning light near the center of the panel that was to get our attention if we had a problem. The light meant I should look elsewhere for indications of the problem.

I then looked at our panel of warning lights and found lights for hydraulics and speed brakes were also lit. This indicated we had a problem in our hydraulic system, actually three separate systems that allowed me to fly the plane with the ailerons, elevator and rudder. They also controlled brakes and nose gear steering on the ground, and provided hydraulic power to numerous other systems, including our speed brakes. A loss of any one of the three systems was no major event; in fact, it was quite common in the F-4E at the time. These old aircraft frequently had hydraulic problems and most pilots treated them as routine, minor emergencies.

I glanced at our hydraulic pressure gauges and saw that we had zero indicated pressure on the "3<sup>rd</sup>" system, our Utility hydraulics. This system provided backup hydraulics to the ailerons and elevator, but with the other two systems working; we would experience no flight control problems with this one out. It also provided hydraulics to the brakes and nose gear steering. This failure would leave us with no brakes or steering on landing, but with a tail hook on the aircraft, we shouldn't have any problems either. We would simply take the "cable", a steel cable stretched across the runway about 1000 feet from the approach end of the runway. It would stop the aircraft when our hook caught it and then we would be towed to our parking spot. This is a normal landing procedure for Navy pilots on aircraft carriers, but we only used it primarily for this type of emergency.

Having determined quickly that we had a minor problem, I informed my backseater, Jim, of the problem and then looked for our leader again. Our rejoin on him was proceeding nicely and I called and told him our problem. Common practice in a formation flight was for an aircraft experiencing difficulties to take the lead of the flight and my leader directed me to do the same. This allows the pilot of the aircraft with problems to concentrate on the problem and not have to worry about flying in formation with the lead aircraft. So, I took the lead of the formation as I slowly passed the leader and he moved back to fly off my left wingtip.

At this time, I began to turn the aircraft to take us home to Zaragosa. As I started this turn about 45 degrees of heading to the right, I noticed something not quite right with our flight controls, but didn't really think much about it. Our flight leader had also taken this opportunity to fly under our aircraft and look at the belly for the standard indications of hydraulic failure. He found them.... The belly had red streaks of hydraulic fluid coming from the mid-section of the belly and the speed brakes were partially open since full pressure was no longer there to hold them shut. Our leader reported this to me and then moved to a position about 1/3<sup>rd</sup> of a mile (2000 feet) to our right side. This was to place him out of our way if we needed any special maneuvering with our problem.

As I neared the heading that would take us home, I began to roll out of our turn, pushing the control “stick” to the left to reduce our bank. Now I noticed another problem. After pushing the stick full deflection to the left, there was no corresponding change in our bank angle. We were still in a right turn! If the stick (and ailerons) would not roll us out of the turn, I knew I would have to try the rudder. I stepped on the left rudder with my foot and the plane smartly rolled out of the turn.

Now I thought we might have a real problem. I moved the stick sharply left and right and saw no movement of the aircraft. This was not the way it was supposed to work. In fact, with our multiple hydraulic systems, if the ailerons didn’t have the required pressure to work, then NONE of our flight controls should be working. And we should have been falling out of the sky. But we weren’t.

Suddenly, the stick moved on its own, but again with no movement from the aircraft. That got my attention also. I hit the “paddle” switch, a lever on the front of the stick that’s intended to disconnect all electrical augmentation from the flight control system. I assumed something there was causing the stick to move on its own. (This movement was never satisfactorily explained by the accident board experts.)

I also felt it was time we begin to slow down. We were flying at around 3000 feet (1000 meters) above the ground and 350-400 knots. I grabbed the throttles and began to pull them back. But I found I couldn’t move them. They were frozen in place at about 85% of full throttle and would not budge. Now I knew we had greater problems than a simple hydraulic problem. Not being able to turn the aircraft and having no airspeed control would make it hard for us to get back to Zaragosa and land. So, to slow the aircraft I started a climb, bleeding off airspeed as we gained altitude.

I spoke to Jim in the back seat. Since the onset of our problems, Jim had been busy finding the emergency checklist that he knew I’d ask for soon to walk through the steps we would need to land our aircraft. Jim was not yet aware of our stick and throttle problems. I told him that we might have to eject. Jim’s response was simple.... “You’re shitting me.” “No”, I replied, “we might have to eject.” I then told him of our real problems. He responded again, “You’re shitting me.” I also radioed our flight leader and told him what problems we were experiencing and that we might have to eject. At this point I really did not know what our real problem was with the aircraft, but I knew we had serious flight control problems.

Our leader took immediate action. He called the controller at Bardenas Range and instructed him to scramble the rescue helicopter. He knew a helicopter was at the range daily during flight operations and he should get it in the air in case we needed it. Unknown to him, the helicopter was already in the air. Because we were the first flight of the day, the helicopter was not required to be on the ground at the range, but it could be enroute there while we worked the range that first period. Then, when we departed and before the next F-4 flight showed up, he would land at the range and remain there the rest of the day. Since we were on the range’s radio frequency, he had been monitoring our emergency since our first call to the flight lead. And he responded quickly when our

leader asked for the helicopter to launch. He replied that he was in the air and asked for our position.

In the meantime, I had other things to contend with. Many of our engine instruments were going crazy. I noticed that our fuel gauges read EMPTY. Had we lost all our fuel? But then I saw them move to a more normal reading again. And we were still flying, so we hadn't run out of gas yet. Just minutes earlier when leaving the range, I knew we had had sufficient fuel to get us home, plus some reserve. Then I saw other engine instruments fluctuating wildly. The RPM, EGT, and other gauges were moving erratically, but I noticed no similar engine noise indicating they were having problems.

In the back seat, Jim was dealing with his own issues. He had electrical circuit breakers popping all over. A standard response to this was to reset them by pushing them back in, so he was doing that. He later told me that he was thinking, "I'm not going to eject because of some circuit breakers popping."

Now I was beginning to suspect our problem was one of the worst listed in our aircraft manual. Most versions of the F-4 had ducting installed that went from the engines to the leading edges of the wings. The ducting provided hot air to increase airflow over the wings. But the E model of the Phantom instead uses a mechanical slat system to increase airflow so the hot air isn't required. McDonald Douglas, who made the F-4, had removed the ducts and placed a metal plate over the opening at the engine. However, a note in our manual warns that if the metal plate fails, 17,000-degree air would flow into the root of the wing, burning through multiple electrical wires and causing many unrelated problems. This is what I thought we had. The note in the manual warned that if conditions were not ideal, we may need to eject.

As we climbed to slow our airspeed, I faced another problem controlling the aircraft. The plane wanted to slowly roll to the right, over on its back. The slower speed resulted in less air going over our wings, so I had less control of the rolling motion of the plane. To counter the roll, I added more rudder on the left side, keeping us upright. But the slower we got, the less control I had and I needed to continually add more rudder. Eventually, I had no more rudder to use. The rudder pedal was fully depressed and the rudder was fully deflected to the left. But the plane wanted to roll yet more. I remembered the rudder trim we had on the aircraft. We rarely needed it and I don't recall ever using it before in flight. It's an electrical system and I didn't know if it would work with our other problems. But I tried it and it worked, allowing me to reduce some rudder deflection and yet maintain an upright attitude. So now we could slow yet more and I still had control by adding more rudder.

But I didn't have long to think about this because Jim warned that he smelled smoke. I sniffed the air but didn't smell any smoke. However, moments later I saw another big red light flashing. This one was an engine fire light. This warned that we had a fire near the engine circuitry. Jim then told me again that he smelled smoke. The red fire light was all I needed to see. I now believed it was time to take action to leave the aircraft.

Since beginning my U.S. Air Force flight training in 1974, I've always been taught to use the command, "bailout, bailout, bailout" if we think we needed to eject from an aircraft. It's a no-nonsense command. When it's time to go, use the command to tell the other people on the plane to GET OUT.

But here we sat in our comfortable aircraft. We were not out of control. The plane was still flying and we seemed content in our little "home". This can be a dangerous feeling. Many pilots wait too long because of this and then die in their aircraft because they waited too long to eject. I did believe it was time to eject, but I was comfortable. I had been discussing the situation with Jim and our flight lead. I now told our lead we had a fire and we needed to eject. I don't remember his response, but think it was something like, "go for it."

All of this had taken about five minutes since we had our first indication of a problem. But I've been in a state of "time compression". I had guessed that this took only 2 minutes. It took the accident investigation team, who had reconstructed our flight, to convince me of the longer time period. The mind works in strange ways.

I noted that we were at about 250 knots, the best airspeed for ejection, and about 5,000 feet above the ground. To Jim I calmly said, "Jim, let's go." I prepared for ejection by getting in the proper position. I grabbed the ejection handle that was on my seat between my knees and pushed my body and head against the seat. Jim and I had previously agreed, like most aircrew, that if we needed to eject, he would initiate the ejection. Then the automatic sequenced system would eject him and then the pilot would automatically follow in a preset time interval.

So, I've told Jim that it's time to go and I wait for him to go. And I wait.... And I wait some more. Jim hasn't responded. Jim told me later that he was busy stowing his loose equipment so they wouldn't hinder the ejection. It is a step in our ejection checklist; one that I chose to ignore. Again I say, "Jim, let's go," this time with a little more urgency in my voice. And finally, I hear a loud noise as his canopy leaves the aircraft. Then I hear his seat go as a mini-explosion carries his seat upward with a force of 12 Gs or more. Then I wait. And I think, "Let's go...." And I wait some more. Time expansion has hit me. Everything has slowed down.

Finally, after 0.3 seconds have passed from Jim's seat leaving, my canopy explodes as it leaves the aircraft. It is rapidly followed by my seat firing and I'm ejected from the plane. Now it seems like I'm on the wildest carnival ride made. The wind hits me at 250 knots and the wind shakes me with a constant beating. But it doesn't last as we rapidly slow. I'm still in the seat, but not for long. Since we are under 10,000 feet high, more automation takes place as a small shotgun sized slug fires from the seat, pulling out the small pilot chute that will then pull out my main parachute. About the same time, my ejection seat separated from me, leaving me hanging below the main parachute. Swinging below me on a 30-foot rope is the survival kit that we sit on while in the ejection seat.

It seemed like I hung in the parachute for a minute and then my training came back to me in a flash of thought. I had been through two survival schools and countless other training sessions and they all impress us with the need to accomplish some things in those first seconds after an ejection. The training kicked in, and with a rush of adrenaline I ripped off my oxygen mask and I threw it away from me with a hard throw. Then I glanced up to look at the parachute. I did this very quickly, determined it was OK and then pulled two lanyards (loops of cord on the parachute lines) that cut four parachute lines, giving me more control over the parachute. I now had a little directional steering and could steer the parachute if I needed. What I didn't notice in my adrenaline-fueled haste was the 10 foot rip in one section of the parachute. Had I noticed it, I would not have cut the four parachute lines. But this rip didn't increase my rate of descent by very much.

I also noticed that I was beginning to swing a lot in the parachute from one side to another. Two separate things caused this. The five-pound slug that pulled out the initial pilot chute is hanging at the end of a rope and it is swinging from one side of the parachute to the other. Each time it swings, it causes part of the parachute to lose some air. I did not like this but could not control it. I also saw below me that the survival kit was swinging wildly through the air. I could control it! A metal clip by my leg connected the kit to me. I pressed the clip and released the rope to the kit. The survival kit rapidly fell away from me. The accident investigation team never found this kit.

Now I was beginning to relax and look around. I could almost enjoy this ride in the parachute. I saw Jim in his parachute some distance from me. I didn't see our aircraft. I was told that shortly after we ejected, it rolled over on its back and plunged straight for the ground. I wish I could have seen that. What I did see and hear was another F-4 flying in circles around us. It was our flight leader, looking to ensure we were OK. Then I picked up another sound. The sound of a helicopter... Our rescue helo was here and waiting for us to land. It too was circling around us.

I looked again for Jim and noticed that I was starting to get close to the ground. It's time to get ready for a landing. This too we have been taught in training and I got in the proper position. Just in time because very shortly the ground rushed up and I hit the ground. But I was ready in time, barely, and made the landing that put me lying on the ground. The adrenaline was still pumping and I jumped to my feet. I thought about running to where I see Jim on the ground. But then I suddenly stopped, sat down and released my parachute. I saw the helo landing nearby and I waited for them to come to me. We were in a newly plowed field that made a soft landing spot for us. It was done!

Actually, only this phase was done. We got a short 15-minute helo ride to Zaragosa and the hospital there. The medics were standing by and we got a quick examination from them and were released one hour later. Heck, it was only ten o'clock in the morning. We got to the squadron where our fellow aviators all wanted to hear the story. After we chatted with them awhile, we went to talk to the airplane maintenance guys. They wanted to hear the story also. Although we don't really didn't know what caused our problem, we assured them that we were OK and we didn't think they caused our accident.

Next came the interim accident board that wanted to talk to us that afternoon. The “bosses” had quickly assembled a team to determine what happened. We talked with them extensively about what we experienced. The next day, we did it again with the real accident board that was assembled from experts. So, we got to relive this many times, over and over. Each time the adrenaline rush and anxiety came again. Even now as I write this, I’m feeling it come again.

So, what was the problem? The accident board determined we had a leak in small hydraulic line near the nose of the aircraft. The leak of high pressure, highly flammable hydraulic fluid started a fire near the nose of the aircraft. The fire then worked its way back towards the engines, under the floor of our cockpits and back into the engine bays where eventually it triggered the fire circuit that gave me the fire light. Along the way, it burnt through numerous electrical wires causing all the popped circuit breakers and erratic engine instrument indications. The engineers also think it melted my stick controls so I could not control the ailerons. The fire also melted plastic coating around the throttle cables so that they were frozen into position.

They never determined what caused the leak in the hydraulic line. Initially when the report was written, the investigators did not speculate on the cause. Later, after the report had been briefed to the 3-star general who was the Vice-Commander in Chief (VCINC) of USAFE (U.S. Air Forces in Europe), the general insisted that the investigators look at the possibility of a ricochet bullet from our strafing. He thought it was possible that a bullet ricocheted off the ground and flew up and hit our aircraft. Although there is a rare probability that this could happen, I’ve talked with pilots who knew about this happening and they said the aircraft pilot can usually tell when they had been hit like this. Additionally, the range control officer that day stated we had a safe strafe pass and he thought it unlikely that a ricochet had hit us. I don’t think this was the cause of the leak. But, this got added to the report and the final report briefed to CINC USAFE had this in it. Then the VCINC used this to convince the CINC that the F-4 should not have a strafing role. He did not believe it to be a useful mission for us and he used this accident to kill the mission. It was not until around 1986 that F-4s began strafing again.

Our colonels, the bosses, wanted us to get back in the air quickly so that we wouldn’t experience a problem of becoming scared of flying. I’ve never thought that was an issue for me. I was scheduled to fly the very next day. Jim did fly, but I woke that morning with a powerful headache so I didn’t fly.

Coincidentally, I was replaced that morning by the commander of our sister squadron at Ramstein, Lt Col Gail Walston. He had arrived at Zaragoza the day we ejected and needed a flight to Bardenas Range before his squadron arrived several days later. He was allowed to take my spot in the flight that day. Unfortunately for him, he hit a bird on the low altitude route to the range and it killed him. His backseater that day, Major Tom Poole, an instructor pilot from his squadron, successfully ejected from the jet, however with multiple injuries. Their story is discussed elsewhere in this book. I find it interesting that two days in a row I was scheduled to fly in flights that ended in crashes.

Our squadron returned to Ramstein the day after that 2<sup>nd</sup> incident, after drinking heavily at the bar that night. We had seen two aircraft losses in two days and were all anxious to get home to our wives and girlfriends in Germany. My wife and Jim's had been notified by our squadron commander, Lt Col Nick Kemp, that we had walked away from our accident so they were relieved, but they wanted us home also. When Nick went to find them, he was had on his blue, formal uniform for a meeting he had earlier that day. It was unusual to see him out of his flight suit, so when our wives saw him come up to them, they immediately thought he had bad news of our death. He was able to quickly assure them that we were OK.

Due to a combination of many factors, I did not fly for almost a month. And the next time I got into an aircraft (for a non-flying exercise), my backseater again was Jim. It gave us a chance to talk again about the accident.

I continued flying from Ramstein for another 18 months after this incident. During that time, we returned to Zaragoza about every 6 months for continuing training. On one of those trips, I was assigned to work at Bardenas Range for five days, controlling the aircraft who were training on the range. During this time, I was able to read the log book kept at the range by the controllers. It lists incidents that happen during the controller's time there. The controllers can write anything they want. Some write little; others write lots. In the book, the controller on duty during the week of our accident wrote a lot; both about my accident and the one the next day. He had an exciting week at the range.

About six weeks after our accident, a strange "package" showed up at our squadron. A C-130 aircraft had come to Ramstein from Zaragoza and on board they had carried the two ejection seats from our aircraft. The seats were covered with dirt from the field they had landed in and they were broken in several locations from the impact with the ground. We kept them in our squadron for a short while, but then had a visit from the guys who normally worked on the seats. They wanted some parts from the seats, primarily the explosive devices. Although used, they felt the devices should come off. So we made a deal with them. We'd let them have the seats to take the parts if they would also fix them up for us. The price: a case of beer from each of us. Ten years later, while at an assignment in South Carolina, I met an artist who liked to weld metal for art. I asked him to make a stand for the seat so it could sit normally on a floor. He did so and ever since I've had the seat on display. It now sits in our local squadron of the Civil Air Patrol for cadets to admire.

The rest of my career in the U.S. Air Force was fairly normal. I was able to fly the F-4E in two other assignments, at Seymour Johnson AFB in North Carolina and at Osan AB in South Korea. I also had two jobs at USAFE headquarters in Ramstein, as well as becoming the commander of a munitions squadron of 130 people on a German air force base at Büchel, Germany. My last job was at the Central Air Forces Command at Shaw AFB in South Carolina. I retired in 1994 from there and moved to my present home in Rapid City, South Dakota. I've had several flying jobs since my retirement. I flew a Cessna 421 for 8 years for a jewelry company. I flew a small twin-engine aircraft, Cessna



310 and a large Cessna 441 turbo-prop aircraft, for an aerial photo mapping company. The company did aerial mapping all over the United States and this year we also obtained some jobs in Canada and Mexico.

I also joined the Civil Air Patrol in 1995. It is a national level corporation that does search and rescue work throughout the United States. It primarily does search work for the U.S. Air Force, looking for missing aircraft in the U.S. using Cessna 182 and 172 aircraft. We are organized by individual states and in December 2005 I was named the commander for the South Dakota Wing of the Civil Air Patrol, a position I held for 4 years.