waited in the cockpit until he started his engines and we started and taxied with him. We had a cloud layer about 4000 ft. thick, so we agreed to climb up through the clouds on different headings with tower approval. He took off and climbed on runway heading. I started my takeoff as soon as he was climbing with gear up. Right after lift off and gear and flaps up, I turned right 20° and climbed up through the cloud layer, breaking out at about 6000. At 7000, I turned on course, and shortly thereafter, spotted the Liberator climbing in the clear. We established radio contact while climbing to a cruise altitude of 10,500. I closed in to about 1/4 mile off his right wing and adjusted power to hold position. We flew together for about an hour, but we had to tell him that we were going to have to increase airspeed. The JU 88 was not handling up to par. We asked for a position update and the latest weather, winds, and en route conditions. In a few minutes, the C-87 pilot responded that we were right on course,255 miles out of Accra and no change in weather, wind, or conditions. We thanked them for their help. We throttled up and resumed normal cruise power and airspeed of 390 kmph and I made my first variation correction of +2°. We crossed the equator about one hour and forty five minutes out at 05° 05' west longitude and shifted from the North Atlantic Ocean to the South Atlantic. Some time later, there was a sudden increase in noise and as I looked around, Cook was hanging onto the cockpit structure and was ghostly white. He had some how hit the entrance hatch release and the hatch had opened under him. The hatch was part of the lower gunner's station and made of heavy steel to mount a .303 caliber gun and provide armor protection. I could not help him from my position, but he finally gained solid footing and got the hatch closed and latched.

I returned my attention to flying and noticed a vapor trail coming off the left wing tip. I was puzzled at first, then realized we were spilling fuel through the vent line at the wing tip. Cook was transferring fuel when the hatch opened, and in the confusion, overlooked it. He shut off the fuel transfer and the vapor trail disappeared in a minute or so.

The aircraft was stable at this speed and in the smooth air. Things were starting to get boring when I noticed some specks on the horizon in front of us. They began to get larger and in a few minutes, I realized it was a flight of aircraft heading to Africa. I soon recognized them as A-20s. One dropped down and turned to try to fly alongside, but soon had to break off as he had to pull a lot of power to catch up with us.

The third and fourth hours passed uneventfully with heading changes and fuel transfers the main activity. At the 4+15 hour point, I began to get the Ascension Island radio beacon and by 4+30, I had a good homing lock on. It indicated we were right on course. The German radio compass also confirmed the heading to the beacon. I was scanning out in front to see if I could spot the island when I saw more specks. Not long after that, I recognized the aircraft as P-39s and felt they must be from Ascension Island, as no fighters could fly this route to Africa. The P-39s established radio contact and advised they wanted to join up on our wings and escort us into Ascension.

We soon spotted the island and started our descent with P-39s on our wings. We circled the field and they broke off as we entered the down wind leg and landed, with an Accra to Ascension time of five hours, fifteen minutes. I went into base operations to close the flight plan and make the usual checks for the next leg. I also checked sundown time for Natal, Brazil, and calculated we could get there 30 minutes before that if we got off in the next hour and a half.

I had started to fill out the clearance when Lt. Cook came in, very upset. He said we had a problem as these "clowns" didn't have any 91 octane gasoline! The base commander and maintenance officer joined us and explained that they had checked and had 50 gallon drums marked 91 octane aviation fuel in the fuel dump. When they went to filter it and transfer it to the service vehicle, however, they found that the barrels were, for some unexplained reason, empty. The maintenance officer had the fuel technical order with him which recommended using the next higher grade if the recommended grade was not available. He had radioed the fuel depot in the U.S. and discussed the problem. They also recommended using the next higher grade, 100 octane. The wing tanks were nearly full (with 91 octane fuel) but the other tanks were empty. We reluctantly agreed to service with 100 octane as we had no choice; they did not expect their next shipment of fuel for five or six weeks. Since we were falling behind our time line, I asked if we could get a couple of carryout lunches. The base commander said he would

Lt. Cook serviced the JU 88 with 100 octane and everything else checked okay: we did not have any write-ups on this 1373 mile leg. I filed a clearance for Natal, our longest leg at 1420 miles with an estimated time enroute of five hours and thirty minutes. We had an extended daylight period as we were going west and crossing several time zones. The lunches arrived and we climbed aboard, strapped in, started engines, taxied, and took off well within our time line for the longest leg. Within a minute, we crossed the shoreline of the tiny island and within ten minutes, we were once again out of sight of land and the security it offered.

We climbed to 10,500 ft cruising altitude and heading of 290°, with virtually no variation change in our heading as the 20° W variation line parallels the flight path all the way on this leg. We would be flying 7° south latitude. The flight was uneventful until three hours and 45 minutes out of Ascension. We began to feel a little vibration in the airplane and it continued to increase. At four hours out, we realized that the right engine had started to run rough with a vibration. The left engine was also starting to vibrate. Both Lt. Cook and I realized that we had serious trouble and, as both engines were affected, we concluded that the 100 octane fuel was damaging them. Suddenly the front cylinder on the left bank of the right engine began to spit fire and make a hell of a racket. In a few minutes that cylinder went completely dead and the racket stopped. Both engines were now running rough and vibrating.

The airspeed dropped off about 10 kmph. I checked our position and put it at about 400 miles from Natal with an hour and a half to go at our normal cruise speed. We knew we might have to ditch, being so far out. I asked Cook to check our fuel remaining and he said we had plenty, with wing tanks full and some remaining in the bomb bay tanks, I decided that with plenty of fuel I would increase power to recover the lost airspeed and pick up another 10 to 15 kmph. I decided if we had to ditch, I wanted to get as close to shore as possible. We did not have a radio that could reach shore from this far out. I wanted to get into the active ship lane, which was closer to shore, and I wanted to ditch before dark if we had to. I was undecided on whether to release the P-38 tanks or keep them for flotation. Also whether they might hit the tail section if I released them empty. I now had the airspeed up to 400+ kmph. I reviewed these actions with Lt. Cook and he agreed. As the minutes passed, we were holding our own in airspeed. I began to sense that the vibration on the left engine was attenuating. The vibration in the right engine now seemed to be steady rather than erratic as