

## FACE TO FACE WITH WERNHER VON BRAUN

Wernher von Braun was “Mr Space” in my opinion. I remember going by his office in Huntsville, Alabama in 1951 and seeing a model of a space vehicle, which resembles the aircraft returning the shuttle back to Kennedy Space Center from Edwards Air Base. The model had a fly back booster instead of the present shuttle boosters that are recovered and refurbished. The fly back booster was never developed until 2019. Congress would not appropriate the upfront money which was required. Now, that we look back, millions would have been saved had it been developed. The costs to recover and refurbish the boosters are far above the estimated costs that were projected.

Back to the story about my first face to face meeting with Wernher. It was after a night launch of a Jupiter. At liftoff, the launch pad was bright as day until the vehicle was several hundred feet in the air. However, after it was dark for a few moments, it started to become bright again --- it was coming back! I had envisioned this could happen before, so I hit the floor near the center of the blockhouse beneath the strongest beam as I had previously planned.. The vehicle landed on the Cape, just a few hundred feet from the launch pad.

I knew exactly what caused the failure. The problem was that a diode was installed too close to the case of a 400 cycle inverter and could easily become shorted. I had discussed the problem with the designer in Huntsville and a decision was made to fly as is. The inverter had passed a "shake test" and should be able to stand the vehicle vibration. However, at liftoff, I noted that the inverter was powering down causing the guidance system to veer off course and had to be aborted by the Range Safety Officer. I told Dr Debus about the problem.

The inverter was removed and returned to the blockhouse to the ready room. I removed the inverter case in the presence of Wernher von Braun and Dr Debus, and sure enough the diode had shorted to case. I told them that the problem had been discussed with the designer, and I'm sure that Wernher had a meeting with him upon his return to Huntsville. My first face to face with Wernher --- not exactly a happy occasion, but there were many more afterwards. I had the key to his suite which was located beneath the firing room for the Apollo launches, and he would come into my office and chat for a few moments. Moments I would never forget