

JAY CAMPBELL -- MY HERO

ON THE NIGHT OF LAUNCH OF EXPLORER I WE WERE IN THE PROCESS OF CLEARING THE PAD, AND ALBERT ZEILER, CHIEF OF OUR MECHANICAL AND PROPULSION GROUP, WAS MAKING A LAST LOOK SEE AT THE EXPLORER I BOOSTER. AS HE WALKED AROUND THE LAUNCHER HE STOPPED AT FIN 4.

HE CALLED ME OVER AND SAID, "FANNIN WHAT IS THIS?" "THIS" WAS A FOAMING CLUSTER OF SMALL BUBBLES COMING FROM THE RUDDER DRIVE HOUSING. MY RESPONSE WAS, " ALBERT, THAT IS HYDROGEN PEROXIDE".

THE ROCKET ENGINE USED A 75% CONCENTRATION OF HYDROGEN PEROXIDE TO GENERATE STEAM TO DRIVE A TURBINE WHICH DROVE THE PROPELLANT PUMPS.

OUR MECHANICAL TECHS WERE IN THEIR VEHICLES READY TO GO TO THE FALLBACK AREA FOR LAUNCH. THEY WERE CALLED AND INSTALLED THE ACCESS GEAR, AND OPENED THE ENGINE COMPARTMENT DOOR. THE BOOSTER WAS FULLY LOADED WITH LIQUID OXYGEN AND A TOXIC HYDRAZINE BLEND OF FUEL WHICH ROCKETDYNE, THE ENGINE MANUFACTURER, LABELED " HYDYNE".

(60% UNSYMMETRICAL DIMETHYL HYDRAZINE/  
40% DIETHYLENE TRIAMINE)

JAY CLIMBED INTO THE ENGINE COMPARTMENT, FOUND A SMALL LEAK IN AN OVERBOARD LINE WHICH WAS NOT USED IN FLIGHT, AND CORRECTED THE LEAK. HE CALLED FOR WATER SOAKED RAGS AND CLEANED UP THE LEAKAGE. JAY CAME BACK OUT, THE DOOR WAS SECURED, AND THE ACCESS GEAR REMOVED.

WE CLEARED THE PAD FOR LAUNCH AND AS THEY SAY, THE REST IS HISTORY.....

ED FANNIN --- MECHANICAL AND PROPULSION SYSTEMS

PAD ENGINEER FOR EXPLORER I LAUNCH

JANUARY 31, 2008-50TH ANNIVERSARY