

46th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
Tribute to Wernher von Braun, born 100 years ago (3B)

Author: Mrs. Karen Thiel
Germany, karenthiel@t-online.de

Dr. Olaf Przybilski
TU Dresden, Germany, olaf.przybilski@tu-dresden.de

WALTER THIEL - SHORT LIFE OF A ROCKET SCIENTIST

Abstract

In 2012 we celebrate the 70th anniversary of the first successful rocket launch that reached a height of 84.5 km and had a speed of 4.824 km/h (5x sonic speed). This rocket flew 190 km to the target location. One of the masterminds of this launch was Walter Thiel, a German chemist and rocket engineer. Thiel was highly talented, during his education from primary school until diploma exams he always received a grade of A in his exams. He was called "the student with the 7 A grades". In 1934 Thiel became Dr.-Ing. (chem.), with the highest possible honor (summa cum laude), when he was only 24 years old. He started to work for the rocket development department at Humboldt University, Berlin, while he was still carrying out research for his dissertation. Walter Dornberger asked him to leave the university research department and become head of rocket propulsion development in his team in Kummersdorf, near Berlin. Thiel's groundbreaking ideas for the rocket engine would lead to a significant reduction in material, weight and work processes, as well as a shortening in the length of the engine itself. Thiel and his team also defined the fuel itself and the best ratio of mixture between ethanol and oxygen for the engine. One of Thiel's team members was Konrad Dannenberg, who later became famous in the development of the Saturn program. In 1940 the propulsion team moved from Kummersdorf to Peenemünde after the launch sites were completed there. Thiel became deputy of Wernher von Braun at the RD units. On the night from August 17 to August 18, 1943, Thiel and his family (wife and two children) were killed during a Royal Air Force bombing raid (Operation Hydra). The moon crater "Thiel" on the dark side of the moon is named after Walter Thiel. The research results of Walter Thiel had a strong impact on the United States' rocket program as well as the Russian rocket development program.