

46th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
Scientific and Technical Histories (2)

Author: Dr. Ake Ingemar Skoog
Germany

CAN A PILE OF SCRAP UNMASK A NEW HIGH TECHNOLOGY? THE A4/V2 NO V89
BÄCKEBO-TORPEDEN

Abstract

Three months before the first V2 rocket attack on London a test vehicle crashed in Southern Sweden on June 13, 1944. At this time the Allied only had a limited knowledge about the rocket (A4/V2) from agent reports and information from the Polish resistance investigating some remains from a crashed test vehicle in Poland. London was confronted with a new weapon supposedly able to carry a one ton explosive warhead some 250 kilometres.

The A4/V2 rocket Serial Number V89 broke apart shortly before hitting ground. In a short time 2 tons of metal parts and electrical equipment was collected and transported to Stockholm for investigations. A first Swedish report was ready by July 21 and the rocket parts were then transported to England for further investigations. By August 18, 1944 the RAE had its preliminary report ready. But how close to reality can a complex vehicle be reconstructed and the performance calculated from a pile of scrap by investigators dealing with a technology not seen before?

In the early 1940's the state of art of liquid propellant rocket technology was outside Germany limited and the size of a liquid rocket engine for the likely performance hardly imaginable. The Swedish and British reports, at that time classified as top secret, have since been released and permit a very detailed analysis of the task to reconstruct the rocket vehicle, the engine itself and its performance. An assessment of the occurrence at Peenemünde and how the rocket became astray and fell in Southern Sweden, together with the analyses by Swedish and British military investigators give a unique insight into the true nature of the V89 and the capabilities of early aeronautical accident investigation methods in combination with solid engineering knowledge.