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Author: Dr. Alexandru Todericiu
Austria, alex@todericiu.com

Prof. Radu Rugescu
Politechnic University of Bucharest, Romania, rugescu@yahoo.com

RELEVANT ANALYSIS REGARDING THE INNOVATIVE CONRAD HAAS MANUSCRIPT OF 1555

Abstract

The 1961 discovery in Sibiu (Hermannstadt) by Dumitru Todericiu of the famous manuscript of Conrad Haas from 1555, published in Hermannstadt, involving the earliest known manufacturing data on rocket middle age fireworks and ammunition had remarkably changed the image on the realm of the beginning of rocket propulsion in Europe. Haas is believed to be the first person to describe a multistage rocket in writing. It is known that until 1961 the oldest document on rocket manufacturing was "The Great Art of Artillery, Part One", known as authored by the Lithuanian Casimirus Siemienowicz, published in 1650 in Amsterdam, and in Paris, München, London, Copenhagen and Warsaw thereafter. The Sibiu discovery has plunged however the beginning of rocket history and the European propriety on the concept of rocket staging one century behind, as a genuine description of a primary and rough concept of small staged powder rockets are surprisingly revealed by the Haas manuscript. The interest is to analyze as far as possible, based on the manuscript itself, the certain originality of the description involved, at least through a comparison of the Haas manuscript with the much newer one of Siemienovich. This comparison reveals that perhaps the Siemienowicz work is based on the Haas manuscript regarding the much important innovation of rocket staging. The matter is important because no earlier Asian, particularly Chinese manuscripts, despite a considerable number of proposals for rocket application, have promoted any idea regarding the rocket staging in general. As far as the actual astronautics makes a considerable extension to the concept of rocket staging, the process of the very birth of this technical concept is very attracting. The creation of such a professional and detailed manuscript was a courageous enterprise at all, as speculations are that the Lithuanian author has paid with his life the intention to publish the second part of his manuscript.