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## BEGINNIG OF ROCKET DEVELOPMENT IN CZECH LANDS (CZECHOSLOVAKIA)

## Abstract

Although first mentions are from 15th Century when both Hussites and Crusaders should used Rockets during Hussite Wars (Bohemian Wars) there is not any strong evidence that Rockets were really used. Some kinds of Rockets were in fact used from 16th Century in Noble Circles as Part of Fire-Works. Some of them were built by Vavřinec Křička z Bitýšky who also published a book of Fire-Works in 1562 – 1569 where he described how to build a raketle (rocket) for Fire-Works. Czech Soldiers were involved also in creation of a Rocket Regiment of Austrian (Austro-Hungarian) Army in first half of 19th Century.

Time of Pioneers of Modern Rocket Development begun in Czech Lands in twenties and thirties years of 20th Century. First Rockets were successfully launched by Ludvík Očenášek in 1930 and one of them possibly reached an altitude of 2000 meters. Vladimír Mandl, lawyer and author of first book on subject of Space Law, patented his project of a stage rocket (vysokostoupající raketa) in 1932, but this project has not been realized.

There were several factories during time of the so called Protektorat Böhmen und Mähren in 1939-1945, when Czech Lands were occupated by Nazi Germany where parts of German Rockets type A4/V2 were produced. But none of the Czech Technicians or Constructors knew how to build and construct an entire rocket. The main Goal of Czech Aircraft Industry after WW2 was to re-birth of a stagnant Aircraft Industry. There was no place to create a Rocket Industry.

Concerns about a Rocket Industry appeared at the end of fifties years of 20th Century. The Political Board of the Central Committee of Czechoslovak Communist Party started to study possibilities to create a rocket industry after the first flight to Space and mainly after the US Nuclear Weapons have been installed in 1957 and 1959 in Italy and in the Federal Republic of Germany. The first project was project of Meteorological Rockets Sokol I and Sokol II in 1960 which never has been completed. In fact Rocket Development and Industry became a Sphere of Interest exclusively of the Soviet Union. In Czechoslovakia, only a Rocket Research and Test Institute was created by the Czechoslovak Ministry of Defence in 1963. First Czechoslovak Rockets which found practical use started to be launched in 1965.