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**AMERICAN MISSILES AND SOVIET ESPIONAGE**

Accomplishments of Soviet spies in pilfering atomic secrets of their wartime American ally are well publicized. The American aviation industry was also under a watchful eye of the Soviet intelligence agents and their leftist sympathizers and collaborators who dutifully reported to Moscow first steps in rocketry and missiles, particularly a development of the American copy of the V-1, called the JB-2.

The U.S. Army's *Signal Intelligence Service* and its successor the *National Security Agency* (NSA) cracked some of Soviet wartime intelligence messages to and from the United States. In a message on 15 September 1944, the KGB New York station described to the Moscow center that it was

attempted to arrange for the robots [as the V-1s were sometimes called at that time] to be produced within a period of 60 days. The firms which were developing ... [jet systems] did not want to arrange for production within such a short time limit. Republic [Aviation Corp.] agreed to turn out the robots and started production 55 days later. 10 [units of JB-2s] were turned out for the first time on 2nd September.

Alexander Feklisov explains in his memoirs that he was, when stationed in the United States, a wartime KGB controller of Julius Rosenberg and his spy ring. Feklisov describes the enormous amount of technical material passed to the Soviets during and after World War II by a member of the ring William Perl, an aeronautical engineer at NACA's Cleveland Center. Feklisov credits Perl with obtaining "the complete blueprint of the first American jet fighter, the Lockheed P-80 Shooting Star" (Feklisov and Kostin 2001, 146). In an interesting twist, Perl provided in 1945, according to Feklisov, "two ultrasecret reports written in Russian and full of incomprehensible [for KGB officers in New York] formulas regarding rockets." Moscow believed that the reports "had been obtained in the USSR by British or American intelligence," but Perl could not find out how "these documents had landed in the offices of NACA."

The first exploratory work on space projects also got noticed after the war. Soviet spies reported on a "sky platform," obviously a satellite, and an "atomic airplane" using "nuclear fission to propel airplane engines." A leading FBI counterintelligence specialist Robert J. Lamphere wrote that in 1950 "we [the FBI] were on the verge of tying [William] Perl more closely to the theft of data about the 'atomic airplane' and were concurrently meeting with the [Atomic Energy Commission] AEC and NACA on that subject. We were also exploring the possibility that Perl, while an assistant to von Kármán, had removed secret files from von Kármán's office, copied them and turned the copies over to Rosenberg [who passed it to his KGB controller]" (Lamphere 1995, 215).

Lamphere described that a jailhouse informer reported that "according to Rosenberg [as the latter explained to the informer], Perl had come to New York from Cleveland, gone up to Columbia University [on the Fourth of July weekend in 1949] and removed some files containing secret data from a safe; then, together with Rosenberg and two other men, ... had photographed the secret data. ... Records showed that Perl had visited the Columbia laboratory and office of his former boss, Theodore von Kármán, and von Kármán told us [the FBI] that Perl knew the combination to his locked safe and could well have removed documents from it. We discovered that after this weekend ... Perl made an unusual deposit to his bank account ... ." The FBI "had only circumstantial evidence, not enough to stand in court to prove Perl to be a spy. So in 1953 Perl was tried and convicted of perjury — having lied to the grand jury about knowing Rosenberg and [another convicted spy Morton] Sobell — and was sentenced to serve five years" (Lamphere 1995, 249, 250).

# Blazing the Trail

## The Early History of Spacecraft and Rocketry

**Mike Gruntman**

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ISBN 156347705X; 978-1563477058

**505 pages with 340 figures**

**Index: 2750+ entries, including 650 individuals**

This book presents the fascinating story of the events that paved the way to space. It introduces the reader to the history of early rocketry and the subsequent developments which led into the space age. People of various nations and from various lands contributed to the breakthrough to space, and the book takes the reader to far away places on five continents.

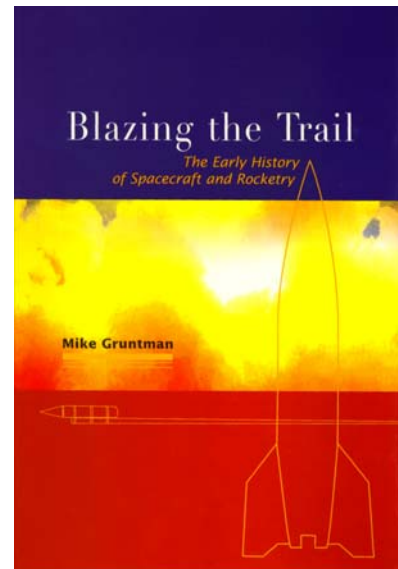
This world-encompassing view of the realization of the space age reflects the author's truly unique personal experience, a life journey from a child growing on the Tyuratam launch base in the 1950s and early 1960s, to an accomplished space physicist and engineer to the founding director of a major U.S. nationally recognized program in space engineering in the heart of the American space industry.

Most publications on the topic either target narrow aspects of rocket and spacecraft history or are popular books that scratch the surface, with minimal and sometimes inaccurate technical details.

This book bridges the gap. It is a one-stop source of numerous technical details usually unavailable in popular publications. The details are not overbearing and anyone interested in rocketry and space exploration will navigate through the book without difficulty. The book also includes many quotes to give readers a flavor of how the participants viewed the developments. There are 340 figures and photographs, many appearing for the first time.

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Book details (including **index** and **reviews**) at: <http://astronauticsnow.com/blazingthetrail/>

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