

50th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
Scientific & technical histories (2)

Author: Mr. Angel Felix Cuellar Villarroel
Spain, a.felix.cuellar@gmail.com

ANTI SATELLITE SYSTEMS: THE HIDE FACE OF SPACE.

Abstract

In contrast to the Apollo, Salyut, Navstar-GPS or similar notorious space programs, developed during the cold war, the history of ASAT systems is still a hide face of space history. And yet, it is still one of the greatest destabilizing and strategic threats affecting the use of space as we know it today.

On Friday, October 4, 1957, the USSR launched the Sputnik. US officials were concerned, more about the R-7 launcher than the satellite itself. The implications of an operative ICBM was another great stroke, similar to the one experienced in 1949 when the USSR got nuclear capacity. But not everything was bad about that launch. Four days after the launch, President Eisenhower said: "the Russians have done us a good turn, unintentionally, in establishing the concept of freedom of international space-the President then looked ahead, and asked about a reconnaissance [satellite] vehicle."

The Soviet ICBM capability and the use of space for surveillance by the US would cause a chain reaction, in both countries, that would lead to the concept and development of Anti Satellite Systems. ASATs systems seek the same objective: to threat and be able to eliminate space systems from others countries. This simple logic is still used today. And not only by these two countries.

This paper will shed some light on these systems and their historic programs. We will talk about the development, motivation and logics behind these programs. From the early days of space exploration, with the US nuclear test in the upper atmosphere or the Istrebitel Sputnikov (Satellite destroyer) of the USSR, to the Reagan Strategic Defense Initiative and looking at the last Chinese ASAT test in 2007.

In the chaos theory, there is a concept called "The Butterfly Effect". This concept claims that small causes can have large unknown effects. In space, ASATs systems can be these small causes. And we have to know these systems in order to prevent larger and unknown effects.