Paper ID: 68254 oral student

56th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4) History of French Contribution to Astronautics (3)

Author: Ms. Marion Pigassou International Space University (ISU), France, marion.pigassou@community.isunet.edu

> Prof. Gongling Sun International Space University, France, gongling.sun@isunet.edu

FROM VERONIQUE TO ARIANE 5, THE SIGNIFICANT CONTRIBUTIONS OF FRENCH SPACE

Abstract

The onset of World War II necessitated the secretive development of the first French rocket more than 75 years ago. The 1950s saw France dominate the European space landscape, and it became the third country in the world to launch a satellite. Since then, French launch vehicles have evolved significantly through various programs such as Diamant and Ariane. The Ariane family is one of the most reliable launchers in operation today and has dominated the telecommunications satellites delivery market to Geostationary Earth Orbit in recent years. This article explores the history of French space, from its inception up to the development of the Ariane 5 program. Studying its evolution in both historical and technical contexts, this work will discuss French launchers and the country's contribution to European launchers. The analysis includes the market changes that forced adaptations in the French space program alongside the international cooperation necessary to achieve them. This work was developed within the frame of the International Space University (ISU) annual individual projects for the Master in Space Studies 2022 program.