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Author: Dr. Philippe Varnoteaux
Institut Français d'Histoire de l'Espace, France, ph.varnoteaux@orange.fr

HAMMAGUIR AND FRANCE'S FIRST STEPS IN SPACE

Abstract

The first modern missiles appear during the World War II and after 1945, France seeks to perfect them. To conduct experiments, the Centre Interarmées d'Essais d'Engins Spéciaux (Inter-Army Center for Special Engines Tests or Ciees) is created in France on April 24, 1947. Set up in the oasis of Colomb-Béchar, in the Algerian desert (then a French possession), it initially features three firing ranges (B0, B1 and B'1). With the International Geophysical Year (IGY) of 1957-1958, a fourth firing range (B2) is established in Hammaguir, 120 km south-west of Colomb-Béchar, to accommodate the Véronique sounding rocket designed for French scientists. Its first space flight (at an altitude of 135 km) occurs on February 21, 1954. Its first scientific flight takes place on October 29, followed by many others from March 1959.

After the return to power of General de Gaulle in June 1958, a new momentum is given to French space policies, in the scientific, industrial and military domains in particular. In order to provide France with ballistic missiles for its nuclear deterrence, the Société pour l'Etude et la Réalisation d'Engins Balistiques (Society for the Study and Realization of Ballistic Vehicles or Sereb) is created in September 1959 to develop different Véhicules d'Essai (test vehicles or VE) tested at Hammaguir. Another goal is to create a national satellite launcher. Between 1961 and 1965, the Sereb thus develops the Diamant rocket derived from its VEs. Faced with a growing number of missiles to be fired with increasingly varying capabilities (tactical and strategic missiles, sounding rockets and launcher), the Ciees is reorganized between 1961 and 1963, and four specialized sites are set up in Hammaguir: Blandine (for liquid propulsion rockets), Bacchus (for solid propulsion rockets), Brigitte (for VEs and Diamant) and Béatrice (for joint operations).

Supported by the Centre national d'Etudes Spatiales (National Center for Space Studies or Cnes) created in December 1961, space activities now benefit from an exceptional center, with highly qualified personnel. Until the closure of Ciees on July 1, 1967 (following the independence of Algeria in 1962), the Hammaguir base allowed for the launch of numerous sounding rockets, as well as four satellites placed in orbit by Diamant. Driven by young engineers and scientists, France laid there the foundations of its missile industry and took its first steps into space.