VEXIN-A Rocket Engine

Developed and produced by Laboratoire de Recherges Ballistiques et Aerodynamiques and Nord Aviation, Vexin-A was a rocket engine used to propel the French Diamant satellite launcher and the Coralie research rocket.

The engine used a combination of UDMH (Unsymmetrical Dimethyl Hydrazine) fuel and N2O4 (Nitrous Oxide) oxidiser.

Four Vexin-A were used on the Coralie, which formed the second stage of the Europa launch vehicle as part of a programme run by ELDO (the European Space Launcher Organisation).

The Europa rocket was flown from its launchpad on the North shore of Lake Hart within the Woomera Range perimeters between June 5, 1964 and June 6, 1970.

The first five flights only had a life Hawker Siddeley Dynamics Blue Streak booster carrying fibreglass or mockup upper stages and were either partially or completely successful.

Flight F6.1 on the 4th of August, 1967 saw the first use of a life Coralie second stage and, despite a successful boost out of the earth's atmosphere and separation from the booster, failed to ignite and therefore would have crashed just North of the first stage impact zone in the Simpson Desert, East of Alice Springs.

During flight F6.2 the Coralie second stage failed to separate from the Blue Streak booster and therefore would have crashed with that booster in the designated impact zone in the Simpson Desert.

Between the 30th of November, 1968 and the 6th of June, 1970, the Coralie stage worked successfully during the last three launches of the Europa rocket from the Woomera Rocket Range.

On those occasions the second stage crashed in the Pacific, North of Papua New Guinea, making the Simpson Desert the only location from which the engine on display could have been recovered.



Europa rocket's Coralie second stage with four Vexin-A engines at the Nord Aviation Factory.



Europa rocket on the launchpad at LA-6 on the North shore of Lake Hart at the Woomera Rocket Range