

AIRMAIL SPECIAL!

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France's Post-war Mail Rocket Experiments

Today, the use of uncrewed aerial vehicles to deliver vital supplies to remote locations is the subject of extensive study and trials. The idea of using unpiloted machines for such work is not new, however, as **JEAN-CHRISTOPHE CARBONEL** explains in his history of the *Fusée Postale* in France during the 1950s and 1960s

MAILPLANES WERE USED extensively before the Second World War, and the use of aerial transport for mail was continued after it; but in the post-war period dedicated aerial mail carriers were no longer the focus of attention. By the late 1950s, however, several aircraft designers and manufacturers in France were proposing projects and patented designs for "high-speed unmanned flying vehicles able to establish high-speed transport between main cities separated by a few hundred kilometres, or between points close together but difficult to reach, such as islands", as defined in a 1961 report by France's *Commission des Marchés* (Contracts Committee). It was an idea which is beginning to come to fruition only today with unmanned aerial vehicles (UAVs).

The first proof of official French Post Office interest in such vehicles comes in a memo dated October 23, 1959, from the *Centre National d'Etudes des Télécommunications* (CNET — National Centre of Telecommunication Studies, established in 1944) to *Monsieur le Directeur Général des Postes* (France's Postmaster General), indicating that "CNET is currently studying rockets for postal applications in close co-operation with Sud Aviation". The Post Office expressed a wish for a very-short-range — "a few hundred metres at most" — rocket-powered aircraft to be used for "delivery to remote mountain offices and islands not far from the mainland, to which access during

bad weather is not always easy". Ultimately, however, only medium-range vehicles would be offered by the manufacturers.

First concepts

An early project for an unmanned aerial mail-delivery vehicle was proposed in 1946 as the brainchild of the prolific Roger Robert at Matra. The main feature of this presumably turbojet-powered aircraft (based on the presence of an air intake on a project drawing) which "may be used, in particular, for carrying mail over long distances and at high speeds", was a four-bladed rotor to be deployed before landing. The principle was that, at the end of a climbing trajectory, the aircraft was to be vertical, hanging on the thrust of its jet. The rotor was then deployed, either automatically or under manual remote-control. The engine was then to be idled, the aircraft's descent being braked by the rotor in autorotation. The descent was then to be controlled "so that the aircraft contacts the ground accurately at the desired point; for instance, on the roof of the post office".

An alternative version had a two-bladed rotor of which the blades were to be stored edgewise into the fuselage (see page XX). No dimensional data has survived for this machine. This concept appears to have gone no further until it was revived more than 15 years later, as we shall see.

The next project to explore the delivery of mail

