

57th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
Memoirs & Organisational Histories (1)

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ROBERT ESNAULT-PELTERIE, THE ONLY AVIATION & SPACE PIONEER INVENTOR OF
ASTRONAUTIQUE

Abstract

Robert Esnault-Pelterie "REP", a Sorbonne scientist, began a fascinating inventor/creator career by being a great, multi-faceted, early aviation pioneer. He invented no less than the airplane's ailerons with his glider N 2 in 1904 and stick with the REP 2 bis in 1908. His REP 1 in 1907 also was the first aircraft with major metallic components, as well as the first to use a radial engine of his invention. Among his many varied inventions were the landing gear shock absorber, high lift devices, safety belt and static testing. He went on building several types of aircraft and engines, winning prizes and records. He built 123 aircraft up to 1918, exported to six countries. The famous Vickers company began with the Vickers-REP1 and 2. Several aircraft companies also used his engines. An organizer as well, he created in 1909 the first association of the fledgling aircraft builders (today's GIFAS), also becoming from its second edition the general commissioner of the first air – static – show which had been created in 1908 (today's Paris Air Show, organized by GIFAS). As a visionary, he began giving talks in 1908 in St Petersburg, with incredible predictions, until shocking the scientific world in Paris in 1913 when he presented a theory of rocketry, including the computation of the astounding speed of 11 km/s necessary to leave the Earth. Eventually a dinner with scientists on 26 December 1927 saw the decision to name this new field Astronautique, as well as the creation of an international Prix d'Astronautique - actually a way to understand better what was going on in Germany! REP masterpiece, "L'Astronautique", the work of a small team, was published in 1930, the most advanced such book at the time. It even started with an analysis of foreign efforts, before addressing the theory of all aspects of rocketry, including e.g. nuclear ramjets and even biology!

This paper will summarize a book in preparation on REP, including an analysis of seminal "L'Astronautique" and its 1935 complement.