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50 YEARS AGO, THE FIRST EAST/WEST COOPERATION IN SPACE - LUNOKHOD 1, THE
FIRST SPACE ROVER**Abstract**

With a long tradition of cooperation between France and Russia since the beginnings of aviation, including nascent Astronautique with REP, and furthered with the unique common Normandie-Niemen fighting squadron established by General de Gaulle in the USSR during WW II, it became natural for the latter to sign on 30 June 1966 a space cooperation agreement. That was five days after becoming the first westerner to watch a launch from the secret “Baikonur” base, that of Meteor 122 by a R-7. Cooperation began in 1967 with launches in space, albeit short suborbital ones, with Soviet MR-12 rockets releasing French sodium clouds above Heyss Island, followed by French Dragon rockets with Franco/Soviet spectrometers from Centre d’Essais des Landes. But history was later made, in the wake of the launch of Luna 17 on 10 November 1970: seven days later, E-8 n 203 landed in Mare Imbrium, whereupon history’s first space rover, Lunokhod, 1 stepped down on the regolith on 17 November, remotely controlled from the Earth. A protective cover then opened, revealing a highly advanced laser reflector equipment, Sud Aviation TL2, built in France, thus marking the historical first East/West cooperation in (orbital) space. On 6 December, Observatoire du Pic du Midi, near Lourdes, then achieved its first Earth-Moon distance measurement. The paper will unravel this fascinating E-8 program, while research is still going on whether the failed E-8 n 201 in February 1969, which introduced both a new lunar landing platform and a new manufacturer (Lavochkin, a former aircraft builder which everybody in the West thought had disappeared!), also had a Soviet UO-3 reflector, as the latter had been ready since 1968. It astonishingly was discovered a few years ago that UO-3 had been tested in 1971 in the Sud Aviation plant of Cannes - the Soviets present there are yet to be identified on the corresponding pictures. It now is also known that in August 1969 five UO-3’s were planned to be delivered for the Lunokhod’s from August 1969 to August 1970, the first to be launched on the next Lunokhod, which however had been delayed to give priority to the new sample return version E-8-5, in order to beat Apollo... This paper will detail how a switch was made from the Soviet to the French reflector, which actually were of very different architectures. The precious contribution of several principal actors of the program is being very useful.