

15. The Breakthrough

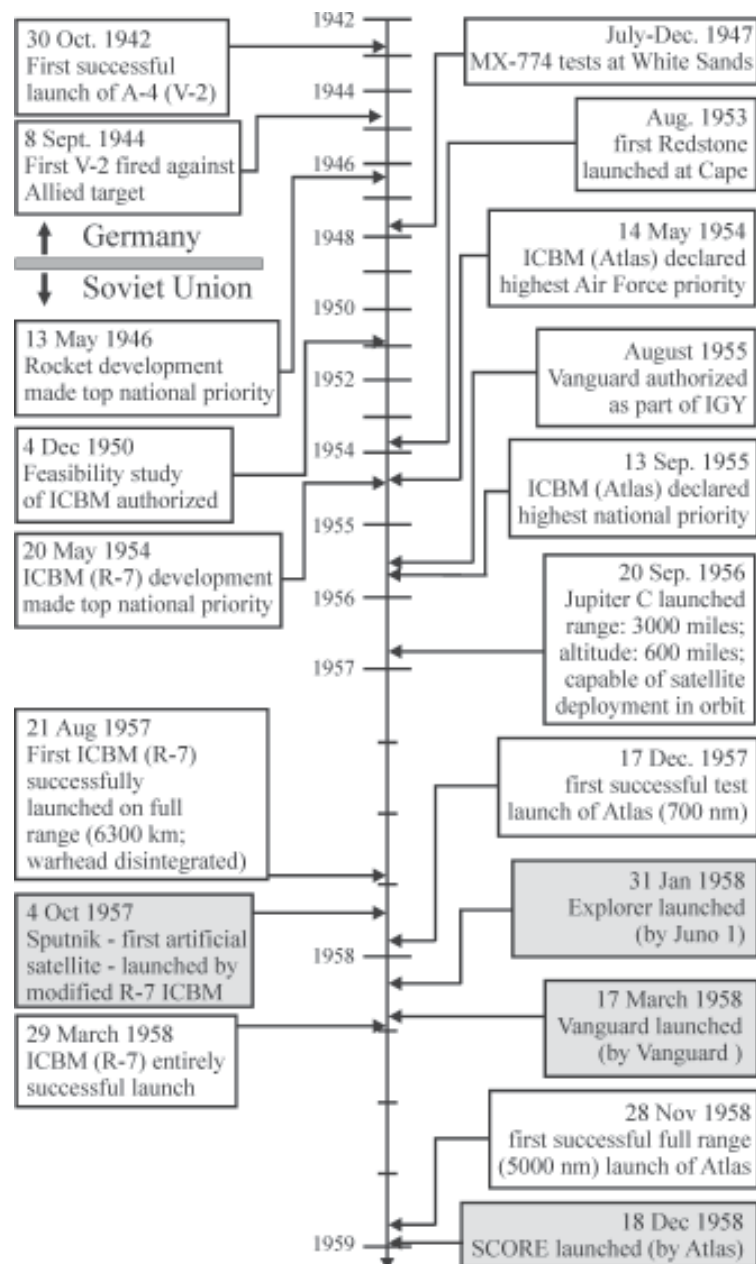


Fig. 15.31. Timeline of major developments on the road to the ICBM and first satellites (shaded boxes): left — Germany and the Soviet Union; right — the United States. The USSR (Korolev's design bureau) was the first to achieve the ICBM and to launch a satellite. By the end of 1958, the United States had placed spacecraft into orbit by three entirely different launchers. It would take more than three years for the USSR to launch a satellite by a rocket designed by an other-than-Korolev's establishment. Figure courtesy of Mike Gruntman.