



The Slide Rule for the “Breguet-XIX”

Pilots born after the 1950s have known nothing but jet planes and the electronic wonders that come along with these aircrafts: computers, inertial navigation systems, and instant onscreen data about their course, location, speed, time, distance, and winds. These instruments have long replaced the clockwork devices of yesteryear. But in 1930, the members of the 22nd Squadron posted at the Military Aerodrome of Tablada (Seville, Spain) were piloting “Breguet-XIX” models with open cockpits, only protected by their leather helmets and goggles. Their flying instruments were limited to a compass, an anemometer, and a variometer: what we may condescendingly label nowadays as “standby instruments.”

Nevertheless, the “Breguet-XIX” had its own slide rule. It was devised by the leader of their squadron: the laureate pilot, Captain Carlos De Haya. Made with a strip of paper measured in millimetres, this slide rule allowed the pilot to calculate up to five hours in five-minute intervals; up to 500 kilometres in 10-kilometre intervals; and speeds of 120 to 170 km/h in 10 km/h intervals.

It was very simple, but incredibly practical and helpful for these pilots. The slide rule would come to complete the set of instruments designed by Captain De Haya to improve the flying experience of his subordinates. This set of devices is known nowadays as the kneeboard, but 60 years ago it was but a piece of sheet metal welded to the right side of the cockpit, meant to display a map and hold a piece of paper where the pilot could take notes when necessary.

