

# **PF20 TEST BENCH**

## **PF20 CONTROL ROOM**

Gabriel DUFRAISSE, VALLERAND Philippe  
*ArianeGroup, Vernon, France*  
[gabriel.dufraisse@ariane.group](mailto:gabriel.dufraisse@ariane.group), [www.ariane.group](http://www.ariane.group)

ArianeGroup Vernon site contributed during the last 50 years to the development and production of Ariane Launchers. Specific test benches were built starting from 1970 to test Ariane space liquid propulsion Viking, HM7, Vulcain, Vinci and Ariane stages. PF20 test bench was developed in the middle of the 70th for the development of Ariane first stage L140. Dismantled in 1986 after Ariane 4 L220 stage qualification, a new PF20 was built in 2022 for the testing of Themis, European demonstrator of reusable stages. This liquid oxygen/methane facility, developed in one year, make possible testing of stages with 10 tons to 100 tons class thrust propulsive systems. Fully new command room, with advanced digital control and acquisition systems was rebuilt in PF20 bunker. The new PF20 test bench is part of ArianeGroup strategy for the development of advanced test facilities on its Vernon site.