**ARTA 6 Ensuring quality for Ariane**.

 **– A ROLL**

TAPE STARTS: 00.00.00

VT STARTS: 00.00.14

**00.00.14**

**[SFX boom! ARTA 6 fires its engine during TEST FIRING at ESA test facility at CSG.]**

Ariane 5’s powerful booster roars into life during a firing test at the Guyana Space Centre.

**00.00.24**

**[Clouds of SMOKE. Fade to smoke of ARIANE 5 LAUNCH as she lifts off from the pad]**

Europe’s launcher has an impressive track record of success and the solid rocket engine on her boosters is regularly tested as part of the European Space Agency’s ongoing 00.00.47

programme to maintain the performance and reliably of the heavy lifter.

 **[INSET CLIP: Giorgio MASTRANGELO, ARTA 6 Project Manager, Europropulsion]**

*In solid propulsion, it is not possible to test a motor before the flight. So we have to reproduce its functions on the ground. The test allows us periodically to check the Solid Rocket Motor is performing as planned, and assess the materials after the launch.*

**00.01.07**

**[ARTA 6 in the Integration Building at the CSG]**

Preparations started in the Integration Building with fluid and electrical connections and inputting measurements to be tested.

**[ARTA 6 travelling along track during transfer to test facility]**

The largest booster produced in Europe was then transferred vertically through the Amazonian forest at the Guiana Space Centre, travelling on its own table, along a specially designed track.

**[ARTA 6 travelling along track, looking up at booster, seen from camera mounted on firing table]**

The test programme called, called ARTA 6, is a collaboration between ESA and France’s CNES space agency under ESA’s Launchers Exploitation Accompaniment Programme, LEAP.

**00.01.43**

**INSET CLIP: Vincent FAVIER, ARTA 6 Project Manager, CNES DNA]**

The *CSG supports us for the operational elements such as air conditioning, energy, fire detection, gas detection. And in addition, the CSG provides and implements operational resources during the campaign, like video links and environmental checks.*

**00.02.05**

**[ARTA 6 arrives at the BOOSTER ENGINE TEST STAND]**

ARTA 6 arrived at the booster engine stand, which is the European Space Agency’s dedicated facility at the CSG, specifically designed for the vertical testing of motors.

**0.02.18**

**[INSET CLIP : Brice SANTERRE, ARTA 6 Project Manager, Airbus Safran Launchers]**

*The nature of the booster’s materials and the fact most of them are reused from one test to another, requires specific upgrading operations. Previous tests have been every 3, 4 years, as preparations for the next one have to start before analysis of the previous test has finished.*

**00.02.37**

**[Firing test in slow motion]**

On the day of the test, the motor burned for 128 seconds, simulating an Ariane 5 flight - and delivered a thrust of over 500 tons. The booster passed its test with flying colours.

**[Ariane 5 on the pad]**

This was also an opportunity for the teams to trial new improvements and materials for Ariane 5, and check quality levels.

**00.03.02**

**[INSET CLIP: Charline DUTERTRE, ARTA 6 Project Manager, ESA**

*After the test, the final stage is to analyse the data and the efficiency of the test equipment, which allows us to check the stability of production and enrich our knowledge of the motor. It also helps us decide whether to introduce into production the changes we’ve tested on ARTA 6.*

**00.03.28**

**[Ariane 5 launch cont]**

The experts collected 443 measurements which will take a year to analyse as part of ESA’s ongoing commitment to guarantee Europe independent access to space.

**End of A-Roll: 00.03.37**

**A-Roll Duration: 03.28**

**B-Roll**

00.03.37

Giorgio MASTRANGELO, ARTA 6 Project Manager, Europropulsion - Clips

00.04.20

Vincent FAVIER, ARTA 6 Project Manager, CNES DNA

00.6.53

Brice SANTERRE, ARTA 6 Project Manager, Airbus Safran Launchers

00.7.43

Charline DUTERTRE, ARTA 6 Project Manager, ESA

00.09.18

ARTA 6 in the Integration Building. Transfer along rails to the BEAP, ESA’s dedicated facility for the vertical testing of solid rocket motors, at the Guiana Space Centre (CSG)

00.11.42

The firing test of ARTA 6

00.12.40

Various shots of Ariane 5 launches from the Guiana Space Centre, Europe’s spaceport in French Guiana.

End of B-Roll: 00.14.11

B-Roll Duration: 10.34