

**DASSAULT**

A V I A T I O N

POLE TECHNIQUE / DPEGE

INFORMATION DE PRESSE

PRESS INFORMATION

Salon du Bourget, juin 2017

PYROTECHNICS ACTIVITIES

Aircraft pyrotechnics

Dassault Aviation has used its pyrotechnics expertise to ensure crew safety. Using dedicated components, the company develops ejection seat ignition systems, interseat sequencing systems for twin-seat airplanes, and canopy break-away and cutting systems.

Concerning the external loads separation, Dassault Aviation had developed a new generation of cartridge. That equipment, adapted to all recent aircraft ejector types used by the French Air Force, needs a low level maintenance. In addition, it is compatible with high electromagnetic ambiances.

Finally, Dassault Aviation also developed, for Rafale fighters, an ejector adapted to the new generation of missiles.

Launcher pyrotechnics

Building on the high quality of its military aircraft hardware, Dassault Aviation has developed components and equipment specifically for Ariane and Vega European launchers, and for the payload fairing of one version of Atlas V. In strict compliance with European Space Agency (ESA) and French space agency (CNES) specifications, the Company designs and produces initiators, pyrotechnic lines as well as different pyromechanisms such as: delays, valves, stages and payload fairing separation systems, multi-layer relays, pyrojacks.

For example, for the Ariane 5 launchers, Dassault Aviation manufactures pyrotechnic kits with all necessary equipment from initialization function to final one.



Satellite pyrotechnics

From the same pyrotechnic hardware developed for launchers, Dassault Aviation has been proposing its ITAR free pyrotechnics for satellites and space probes. These devices perform a great number of functions such as: deployment of solar panels and antennas, apogee motor ignition, and unlocking of mechanisms.

Dassault Aviation designed and built the ASAP (Ariane Structure for Auxiliary Payloads). This structure, used for 100-150 kg micro-satellites launched as auxiliary payloads, includes pyrotechnic devices that separate and distance the satellite from the launcher.

Pyrotechnie pour les lanceurs Pyrotechnics for Launchers

- 1 - **Initiateurs et détonateurs**
Initiators & detonators
- 2 - **Lignes de transmission**
Transmission lines
- 3 - **Relais multi-voies**
Multiway relays
- 4 - **Relais retard**
Pyro-time delay relays
- 5 - **Cisailles**
Bolt cutters
- 6 - **Systèmes de séparation d'étage**
Stage separation systems
- 7 - **Systèmes de séparation de satellite**
Satellite separation systems
- 8 - **Vérins**
Pyro jacks
- 9 - **Vannes**
Valves
- 10 - **Charges de neutralisation**
Neutralization charges

©ESA