



AERONAUTICS - DEFENSE

PILOT SAFETY SYSTEMS (Canopy Severance/Fracturation)

Pyroalliance designs and manufactures pyrotechnic systems involved in different actuations for aerospace applications. A typical application is triggering fracturing cords involved in the aircraft emergency canopy severance.

The overall dimensions as well as final outputs can be adjusted depending on the application. Different actuators are possibly triggered at various moments of the pilot safety sequence.

More generally, Pyroalliance delivers complete pyrotechnic chains adapted to its customers' needs. They are designed and manufactured under Pyroalliance design authority.

PILOT SAFETY SYSTEMS

Operating mode

Pyrotechnic devices enable the implementation of specific systems on military aircraft to be activated in case of emergency. A specific system allows in particular the canopy severance and/or the canopy fracturing thus avoiding the elevated levels of head and neck load on the aircrew member ejecting.

To achieve this, the pilot pyrotechnic safety system is equipped, in particular, with detonating cords integrated into the canopy, which perform its severance.

The system is triggered by mechanical action from the pilot and is completely autonomous as it does not require any external energy (whether electrical, or hydraulic...).

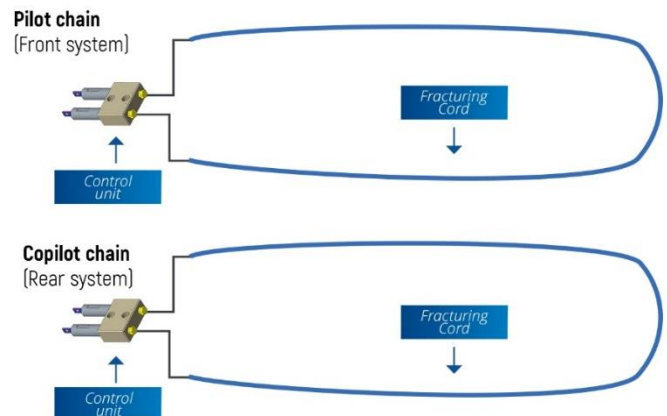
During operation, the part of system installed in the aircraft cabin is optimized to avoid effects on the pilot.

Benefits

- High speed of operation
- High reliability level (integrated redundancy)
- No required maintenance
- Contained effects, no fragments or flames close to the pilot and passengers
- Energetically autonomous
- Easy integration and check
- Extended temperature domain
- Excellent UV resistance
- Vibration and crash resistance
- Life time according to STANAG 2895

Typical performances and features

Operating time	<<1 second
Size, Weight and Power (SWaP)	SWaP adapted to the mission
Temperatures	Adapted to typical airborne military climatic environment
Reliability	Very high
Life Time	Adapted to the mission and life profile
Triggering input	Mechanical action performed by the pilot
Distance order to action	> 8 meters



Applications

- Canopy severance
- Canopy fracturing.

For more information please contact us.
Visit our website: www.pyroalliance.com

CLASSIFICATION

Transport regulation:

- UN Number : UN 0288
- Proper shipping name : CHARGES, SHAPED, FLEXIBLE, LINEAR
- Division : 1.1
- Compatibility group : D

Not restricted by ITAR reaulation

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Produced by the Communication Department of Pyroalliance
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