



## DEFENSE

### FLIGHT TERMINATION SYSTEMS

Pyroalliance designs and produces different kinds of Flight Termination Systems for tactical missiles. Those systems are embarked on missiles which are fired on military test ranges, typically in the frame of the testing and qualification process of the related missiles. Their function is to terminate the flight and protect the test range as well as the populated areas in case the missile dangerously deviates from its nominal trajectory.

More generally, Pyroalliance delivers complete pyrotechnic chains adapted to its customers' needs.

They are designed and manufactured under Pyroalliance design authority.

# FLIGHT TERMINATION SYSTEM

## Operating mode

A Flight Termination System is made of a chain of components designed and assembled to operate a termination sequence. It is typically made of an electro-pyro initiator in a Safe & Arm Device, a pyrotechnic line (if necessary) and a charge.

The initiator embarked on the missile will receive the flight termination order from the ground and transmit it to the Safe & Arm Device that will convert it into a detonation activating a linear shaped charge or possibly another form of destruct charge.

Depending on the design of the Flight Termination System, the linear shaped charge or destruct charge will either cut the body of the missile that will break apart or may also be positioned to cut the piloting axis of the missile's flight control surfaces.

## Benefits

- Functioning time of such equipment is extremely short, thus perfectly fitted for the responsiveness expected from a Flight Termination function
- Redundancy and physical separation of two distinct initiation chains usually contribute to the extreme reliability of function
- Appropriate pyrotechnic components are selected to meet the environment constraints – especially temperatures – associated to the mission profile of the considered missile

## Applications

- Flight Termination function of different tactical missiles calibres, from anti-tank to air-air or cruise missile

**For more information please contact us.**  
**Visit our website: [www.pyroalliance.com](http://www.pyroalliance.com)**

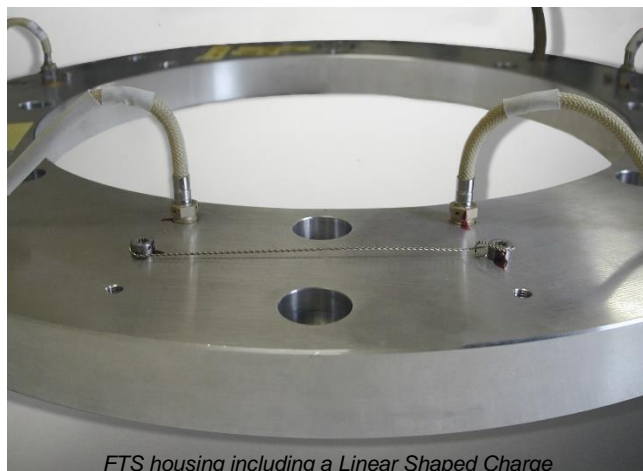
## Classification

- Storage Class typically 1.1D
- Not subject to any ITAR constraint

## Typical performances and features\*

Functioning time	Below 10 to 15ms
Reliability	Better than 0,9999 @90% CL
Size, Weight and Power (SWaP)	SWaP adapted to the mission
Initiation	1A/1W Standard STANAG
Firing current	5A – few ms
Non fire current	1A / 1W / 5min at 100°C
Temperatures	Adapted to typical airborne military climatic environment
Life Time	Adapted to the mission and life profile

*\* Typical requirements met by our solutions – however most FTS are designed to specification and subject to customization*



*FTS housing including a Linear Shaped Charge*

## Les Mureaux Plant - Headquarters

139, Route de Verneuil - BP 2052  
78132 Les Mureaux cedex – France  
Tel. +33 (0)1 34 92 44 44 – Fax +33 (0)4 94 22 86 99

## Produced by the Communication Department of Pyroalliance

Photo credits: Pyroalliance