

For an optimal safety of people and equipment

Ejector of parachute for drone



Reliability stemming from the spatial industry

Ease of implementation

Simplicity of manufacturing and maintenance

« An innovative and reliable solution
arisen from a passion for paragliding and aeronautics »

Jean Philippe GALLAT
Designer

S a f e t y , U A V ' s f u t u r e[®]

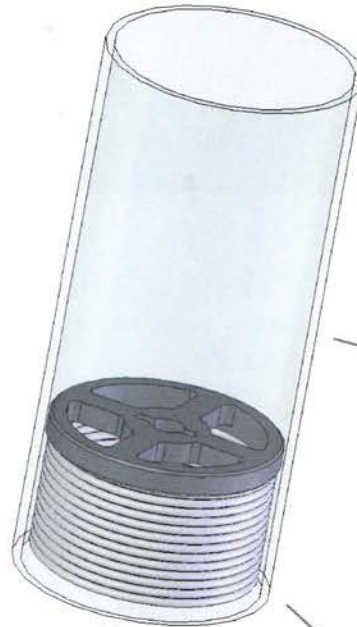
Custom configurations

Characteristics of a device adapted to a drone up to 25 lb. (10 kg) :

- Diameter : 2,75" (70 mm)
- Height : 7,87" (200 mm)
- Speed ejection : from 9.8 ft/s to 16.4 ft/s (2 à 5 m/s)
- Weight (polycarbonate version) : 10,5 oz. (300 g)

Ignition device with a level of reliability encountered in the aerospace sector

Simple and lightweight device's support. Easy mounting on any configuration

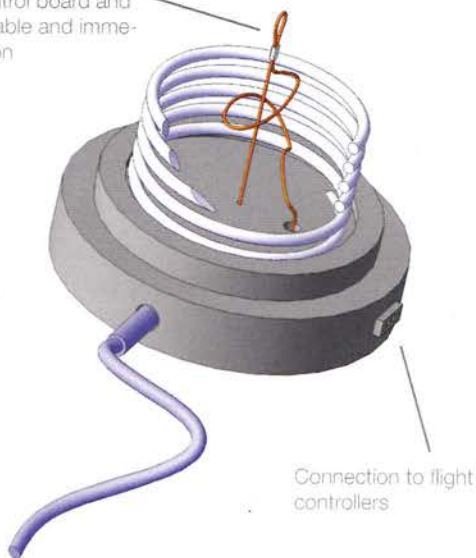


Container with no outflow obstruction or risk of accidental attachment of the parachute or its lines

Spring force modulation to achieve high ejection speeds and deployment of the drone's parachute in an independent way of the falling rate

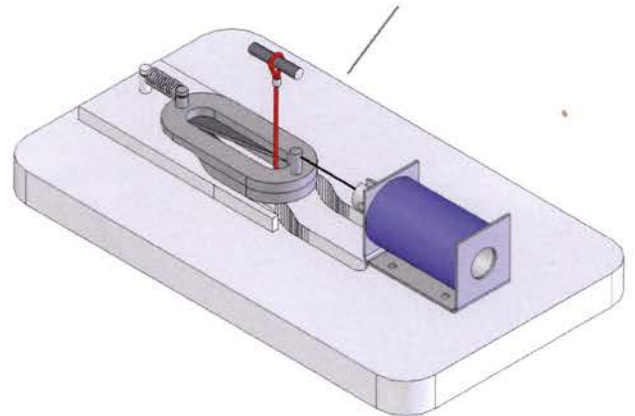
For an absolute reliability : Pyrotechnic cutter

Cuttable conductor connected to the flight control board and delivering a reliable and immediate interruption



Connection to flight controllers

Cutting device ensuring an immediate cut and avoiding any inadvertent cut



For a simultaneous power shutdown

Connected to the flight map, our device provides a simultaneous power shutdown to the ejection. Without relay or electronic component, this signal can be detected to turn off the power of the engines.

For reproducible ejections

Solutions based on a mechanical cutter, allowing powerful and fast ejections, were developed.

The proposed devices are reliable, simple and inexpensive.

Innovation for safety

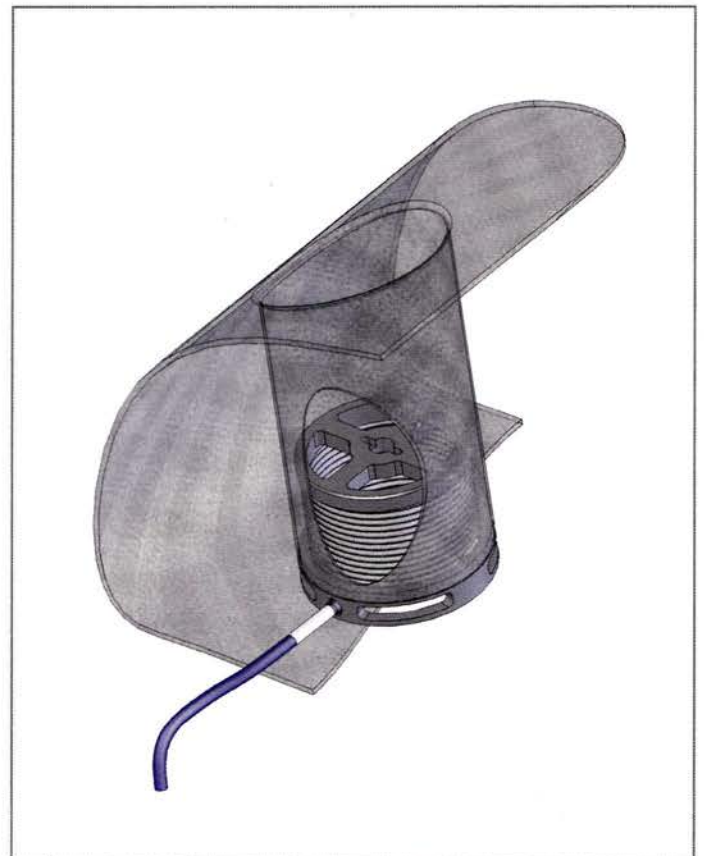
In a growing number of countries, legislation requires drone operators to be equipped with a parachute ensuring a return to earth with a defined energy, this obligation can be coupled with a simultaneous interruption of the power supply.

We offer an ejection device with a powerful and fast ejection while consuming a minimal power.

We investigated the optimal characteristics :

- Low weight
- Strong and fast ejection
- Simple control signal and low power, only requiring a very light battery
- Reliability encountered in aeronautics
- Lack of impact on the parachute's fabric and its lines
- Modularity (folded parachute directly into the container or the pod)

Finally, our ejector can be coupled to a device providing power interruption of the ESCs (Electronic Speed Controls). The absence of mechanical or electronic relay is a major innovation.



The **carbon fiber** version allows a very low weight, thanks to a simple design and a reduced number of parts.

For a drone up to 8.8 lb. (4 kg), an ejector weight of 4.2 oz. (120 g) is expected.

The ejector adapts easily to all types of drone's fairing. The container can be adapted to the drone's shape and its type of material, and the ejection device is easily attached to the fairing. The design prevents any outflow obstruction.

The ejection device may be integrated into the chassis of the drone.

