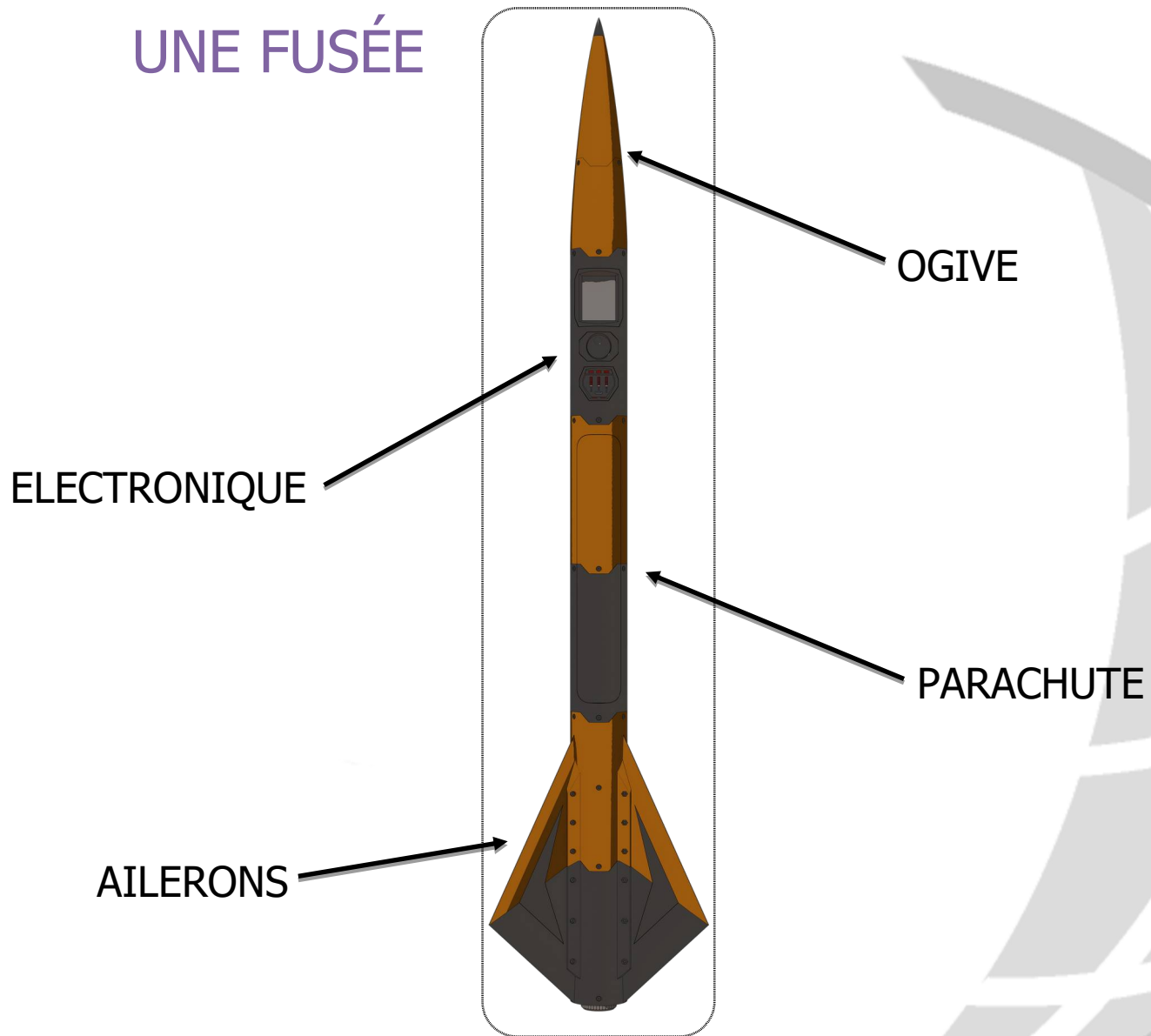


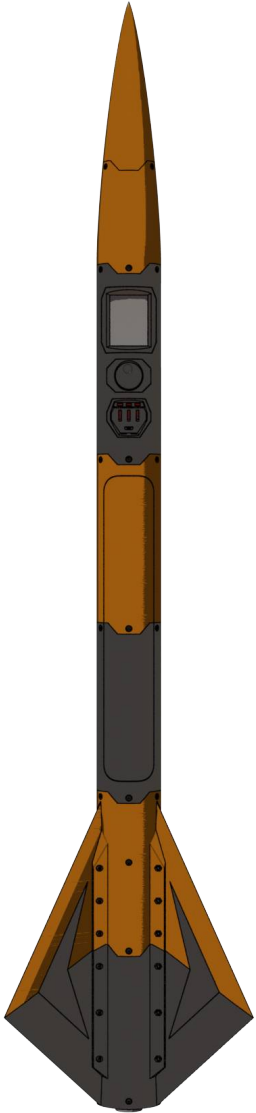
# Trucs & Astuces

# UNE FUSÉE



# Mécanique

[www.planete-sciences.org/espace/Ressources/](http://www.planete-sciences.org/espace/Ressources/)



## VOTRE FUSÉE

- Masse
- Longueur
- Diamètre
- Nombre d'ailerons
- ...

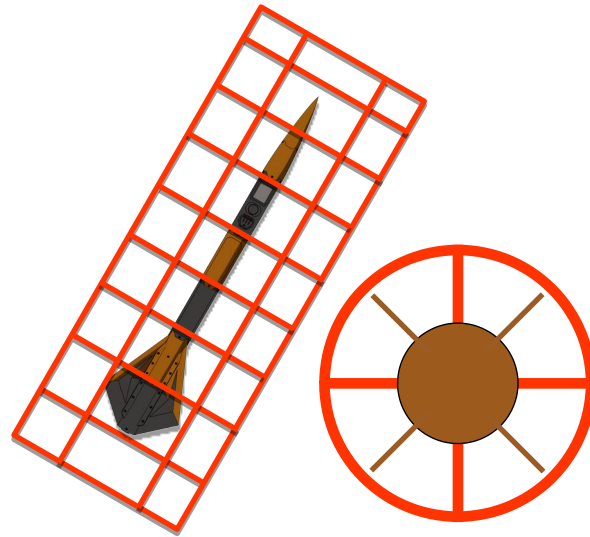
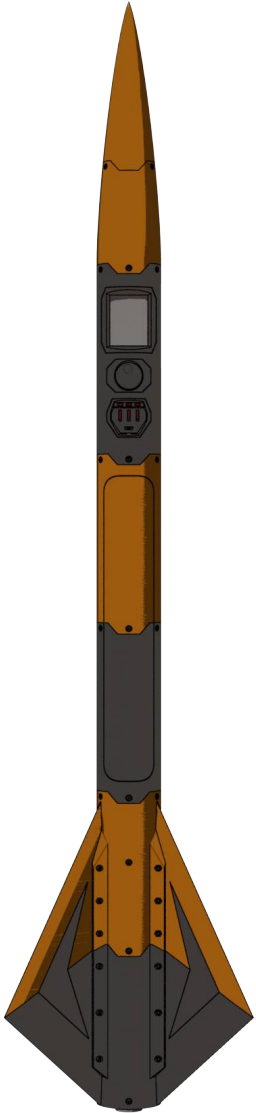
## STABTRAJ

- Dimensionnement conforme au CDC
- Dimensionnement des ailerons
- Dimensionnement du parachute

## CAHIER DES CHARGES

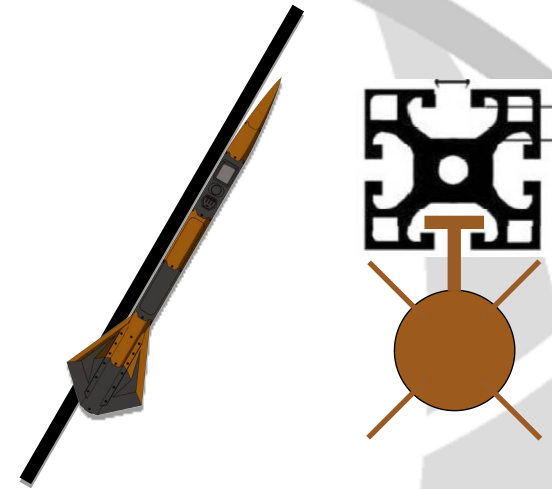
- Finesse
- Vitesse de sortie de rampe
- Portée balistique

# Rampe



**Rampe cage**

- + Simple
- 4 ailerons
- Accès difficile
- Masquage radio



**Rampe rail**

- + 3 ou 4 ailerons
- + Accès facile
- + Moins de masquage radio
- Nécessite des patins

# Rampe



## Rampe cage



# Rampe



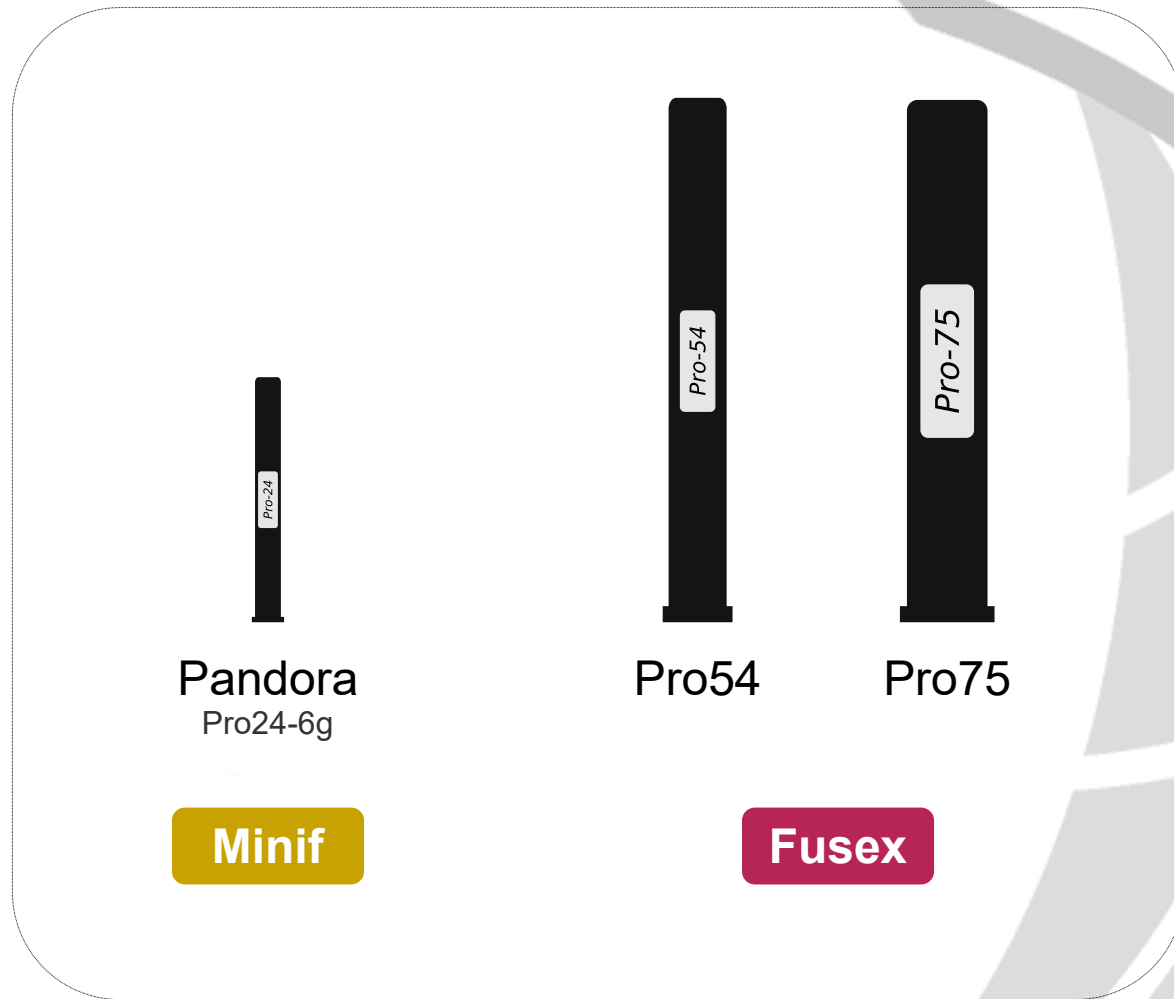
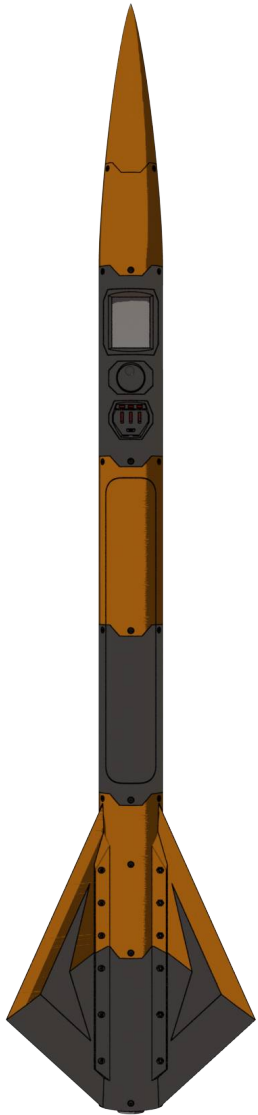
## Rampe cage

# Rampe

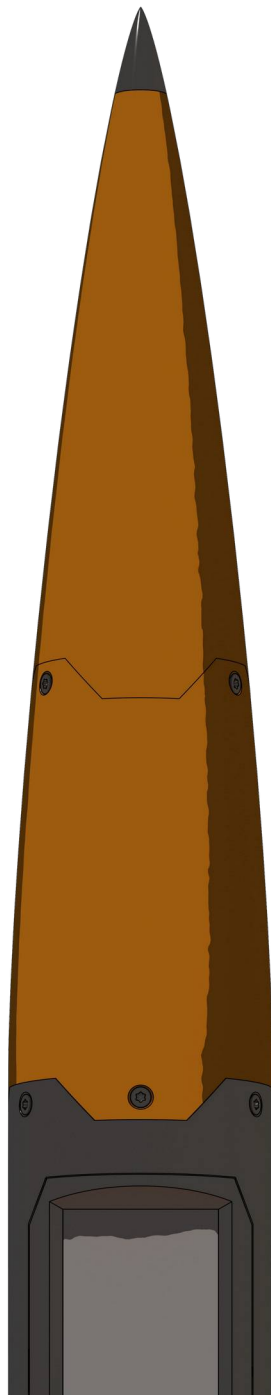


## Rampe rail

# Moteur

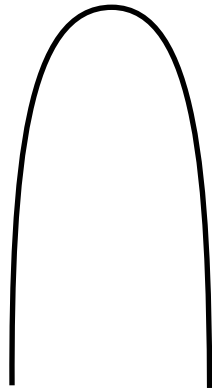




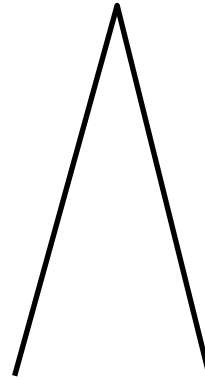


# Ogive

## Forme



Parabolique



Conique



Ogivale  
*Von Karman*

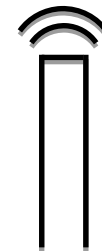
## Comment l'utiliser ?



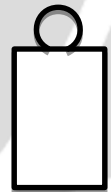
GPS



Sonde Pitot



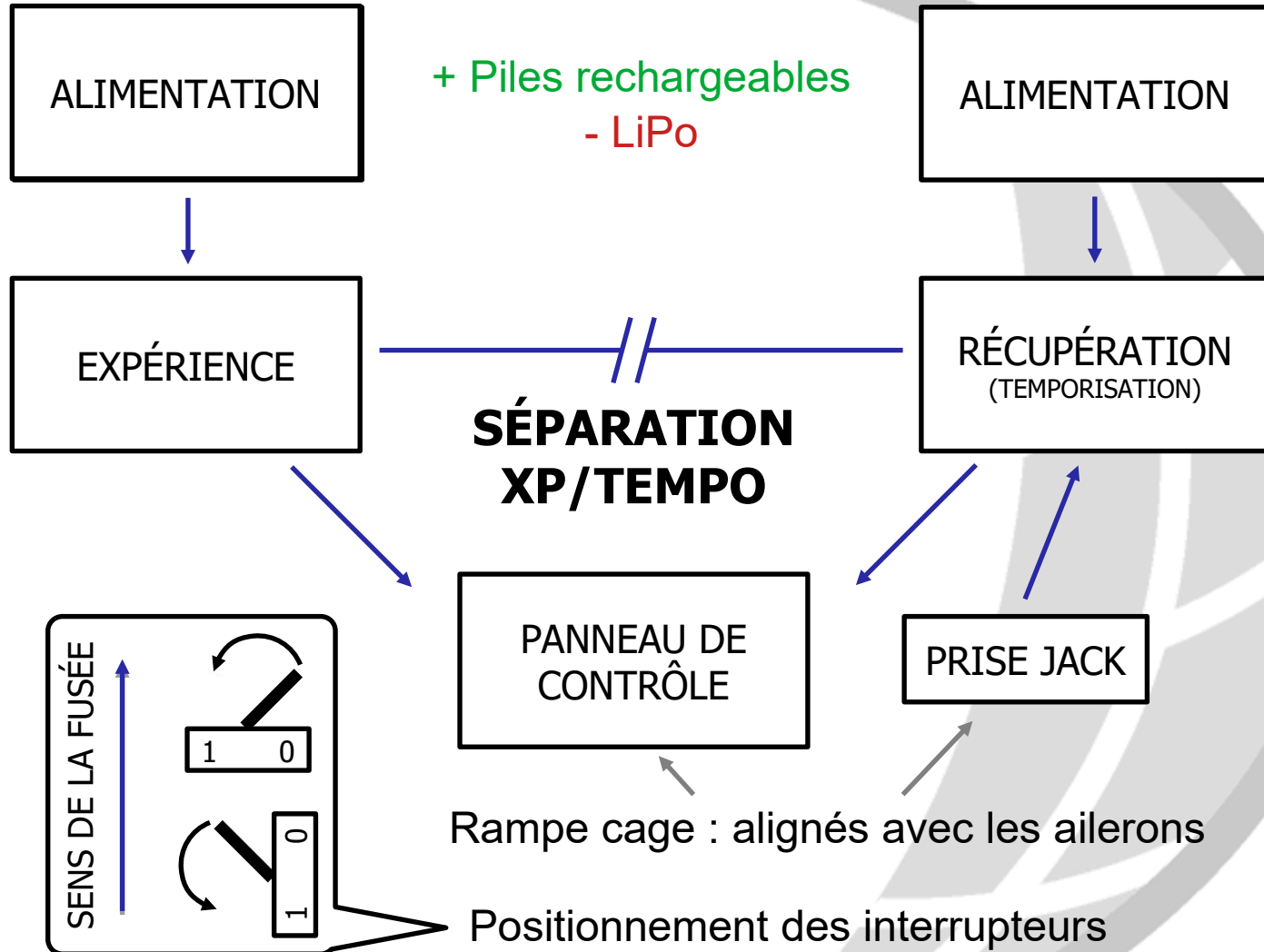
Antenne



Masse  
*CdM trop bas*

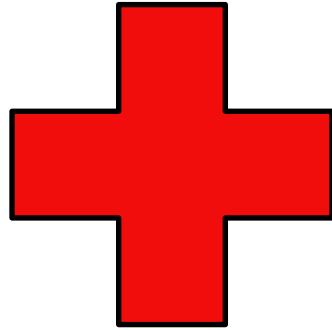
# Électronique

[www.planete-sciences.org/espace/Ressources/](http://www.planete-sciences.org/espace/Ressources/)

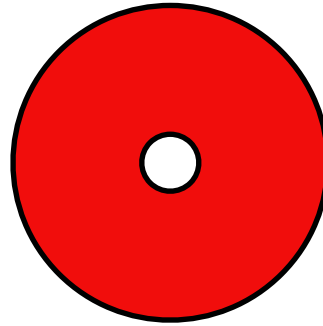


HAUTEUR TRAPPE > 15 CM

## Parachute



Cruciforme



Hémisphérique

- Vitesse de descente :
- masse de la fusée
  - surface du parachute  
*cf StabTraj*

Retenue trappe solide : + Servomoteur  
- Ventouse magnétique

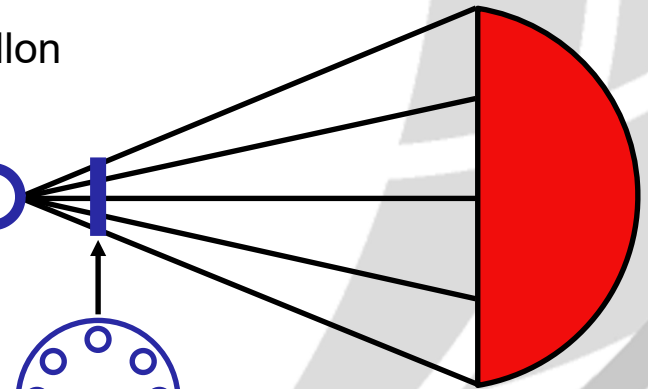
Ancrage fusée solide

Émerillon

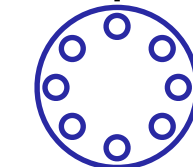


Suspente principale

>  $L_{FUSÉE}$



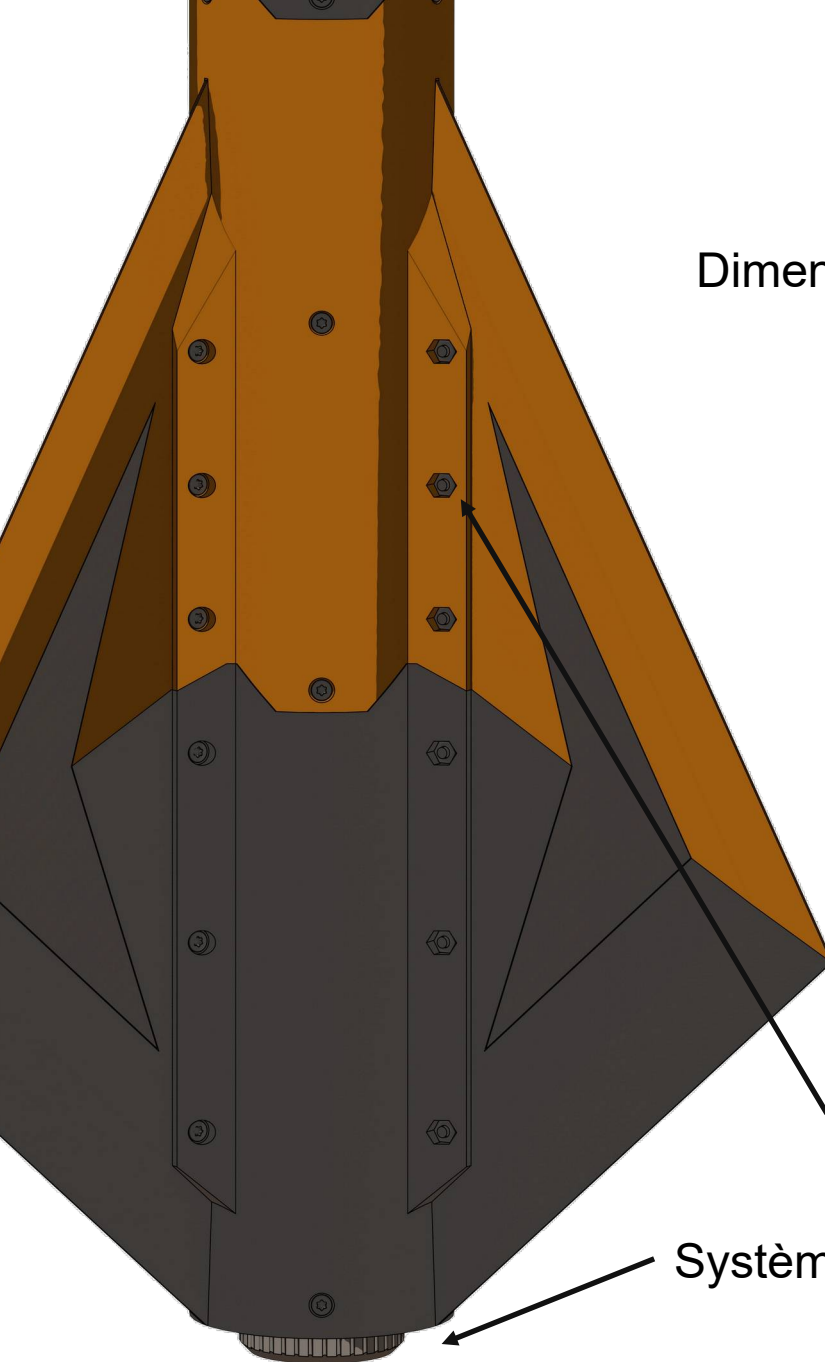
Coins de la trappe :  
arrondis / avec chanfreins

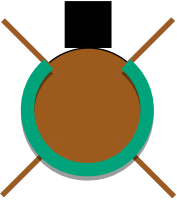
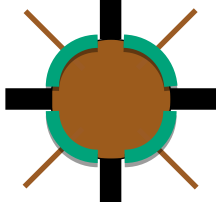
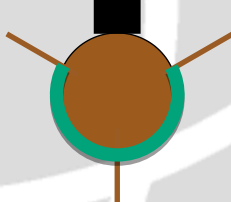


Anti-torche

# Ailerons

Dimensionnement final "tardif" pour assurer la stabilité  
(*masses définies*)



NOMBRE	4 AILERONS		3 AILERONS
	RAMPE	RAMPE RAIL	RAMPE CAGE
POSITION PANNEAU DE CONTROLE			

Bien fixés et solides

Système de retenue moteur obligatoire