



**Escola Tècnica Superior d'Enginyeries
Industrial i Aeronàutica de Terrassa**

UNIVERSITAT POLITÈCNICA DE CATALUNYA

BACHELOR'S DEGREE IN AEROSPACE VEHICLE ENGINEERING

**Study of the viability of a glider drone for the return of
experiments carried by weather balloons**

BUDGET

Author:

Albert GASSOL BALIARDA

Director:

Manel SORIA GUERRERO

Co-Director:

Josep Oriol LIZANDRA DALMASES

June 12th, 2015



Contents

1	Units	1
2	Unit prices	1
3	Costs derived from the study	1
4	Final budget	2

List of Tables

1	List of products and quantities	1
2	List of products with unit prices	1
3	Costs derived from the viability study	1
4	Total costs of the products	2
5	Shipping costs	2
6	Contingencies	2
7	Budget of the project	2

1 Units

Table 1 shows the quantity of each product.

Product	Quantity	Units
<i>PAWAN</i> weather balloon (with shipping costs)	1	units
<i>Discus 2b</i> scale model	1	units
Helium	11,56	m ³
<i>Savox SH-1257MG</i>	4	units

Table 1: List of products and quantities.

2 Unit prices

Table 2 shows the unit prices of each product.

Product	Cost per unit (€)
<i>PAWAN</i> weather balloon (with shipping costs)	205,22
<i>Discus 2b</i> scale model	1342,30
Helium	20,95
<i>Savox SH-1257MG</i>	59,28

Table 2: List of products with unit prices.

3 Costs derived from the study

Table 3 shows the costs that result from the study of viability.

Item	Cost (€)
MATLAB Student License	500,00
Human resources	27000,00
Total	27500,00

Table 3: Costs derived from the viability study.

4 Final budget

Table 4 shows the total costs of the products.

Product	Total cost (€)
<i>PAWAN</i> weather balloon (with shipping costs)	205,22
<i>Discus 2b</i> scale model	1342,30
Helium	242,17
<i>Savox SH-1257MG</i>	237,12
Total	2026,82

Table 4: Total costs of the products.

Apart of the cost of the products, it have to be taken into account the shipping costs of the imported products:

Product	Cost (€)
<i>Discus 2b</i> scale model	315,00
<i>Savox SH-1257MG</i> (all the units)	84,63
Total	399,63

Table 5: Shipping costs.

And it is added a percentage (10%) of the product costs (including shipping costs) to take into account possible contingencies:

Contingencies	242,64 €
---------------	----------

Table 6: Contingencies.

Then, the final budget is:

Budget	
Products total costs	2026,82 €
Shipping costs	399,63 €
Costs of the study	27500,00 €
Contingencies	242,64 €
Budget	30169,09 €

Table 7: Budget of the project.