Libertad 2 Mission
Towards the Consolidation of the Colombian Space Age

Gustavo Puerto, Lucy Medina, Paula Lago
Agenda

- Objectives
- Antecedents
- System Architecture
- Schedule
- R&D
- The team
Objectives

- Design, Build, Integrate and Launch a Cubesat 3U with a minimum lifetime of 1 year
- Develop practical payloads
- Research in aerospace
- Consolidate the leadership in Colombia
Antecedents: Libertad 1
Libertad 2: System Architecture

- Payload 1 Camara
- Payload 2 Nanocircuits
- Power System
- Attitude Determination and Control

DATA BUS

- Solar Cells
- C&DH
- Telemetry
- Communications
Libertad 2: Schedule
Libertad 2: R&D

- Development of an image acquisition system for Cubesat
- Design of interfaces for the integration of Nanocircuits in Cubesats
- Attitude determination algorithms for efficient power consumption
- Optimization of power systems
- Design of web/mobile applications for the tracking and monitoring of Cubesat
Libertad 2: The team

School of Engineering Heads
Rafael Ordúz
Lucy Medina

Technical Director
Gustavo Puerto

Students
Power
Jesús González
Freddy Díaz
Paula Lago

C&DH
Freddy Díaz
Paula Lago

Communications
Camilo Londoño

Payload
Freddy Díaz
Alejandro Garzón
Paula Lago
Jesús González

ADCS
Ronald Hurtado
For more information contact to

Gustavo Puerto Leguizamón

gustavo.puerto@usa.edu.co
Tel: +57 317-3672718