



## Identification of the installation/facility :

Country: SPAIN  
Location (city): MAZAGÓN (HUELVA) CP21130  
Name of the facility: CENTRO DE EXPERIMENTACIÓN DE "EL ARENOSILLO" -CEDEA-  
Date of construction or of acquisition or of main refurbishment: 1966  
Owner: INSTITUTO NACIONAL DE TÉCNICA AEROESPACIAL -INTA-  
Contact point: Col. PAREJO-BRAVO tlf:+34959208800; parejobmj@inta.es  
Internet site: <http://www.inta.es/grandesInstalaciones.aspx?Id=2&SubId=11>

## Technical characteristics:

### 1 - Type of infrastructure

Wind tunnel	<input type="checkbox"/>
Propulsion bench	<input type="checkbox"/>
Structures facility	<input checked="" type="checkbox"/>
Material facility	<input checked="" type="checkbox"/>
Simulator (ex. Flight simulator, tower, ...)	<input type="checkbox"/>
Flight test bed (aircraft, embedded facilities, ...)	<input checked="" type="checkbox"/>
Supercomputers	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>

### 2 - Main technical characteristics

#### Structures & Material Facilities:

- INTA's main facilities and installations at the CEDEA include:

Two S-band and L-band (fixed and mobile) telemetering systems  
HF, UHF and VHF communications systems  
Air and sea surveillance radars, NORTHCONTROL  
Mobile trajectory plotting radar, VITRO RIR 778X, 250 Kw  
Trajectory plotting radar, TRACOR RIR 779C, 1 Mw  
Mobile trajectory plotting radar, VITRO RIR 778C, 1 Mw with destruction command  
Three mobile, stand-alone optronic stations, MSP 2000, fitted with IR sensors, TV, cinema and radar (3D, high precision and with telemetric capacities)  
Meteorological centre with real-time information, satellite data reception and full radio sounding system  
Control centre that centralizes all the information necessary for supervising and monitoring a launch operation (Air Traffic Control, meteorology, mapping, sensor data integration, in-flight safety, etc.)  
Evaluation centre: report drafting, analysis and assessment  
Two high-speed cameras (10,000 pictures/s)

To supplement these facilities, the CEDEA also has:

Meteorological laboratory and sounding balloons  
Presentation and conference hall  
Telemetering, radar and optronics workshops  
Mechanical workshop, electrical workshop, health service and warehouses  
Operational accommodation services  
Film processing laboratory

- Flight test bed (aircraft, embedded facilities, ...)



INTA's key facilities and installations at this experimentation centre include:

- MIRACH 100/5 drone system: Autonomous, 250 m/s between 5 and 9,500 m
- VOODOO drone systems: Autonomous, 160 m/s between 10 and 6,000 m
- BANSHEE 500 drone system: Autonomous, 105 m/s between 10 and 6,000 m
- SCRAB II drone system: Autonomous, 110 m/s between 100 and 3,000 m
- SCRAB I drone system: Autonomous, 90 m/s between 100 and 3,000 m
- ALBA drone system: Semiautonomous, 65 m/s, up to 4,000 m
- Workshop for the assembly and integration of vehicles and payloads (22.5 x 15 x 3.5 m), with a 7 Tm travelling crane
- Payload firing and testing centre (8x4 m)
- Rocket warehouses
- Sea platform: 34 m long, 9 m wide and 28 m high infrared target
- Sea platform: 10 m long, 8 m wide and different targets
- 2 Target Boats, Autonomous with speed of up to 27 knots, 8 m long

To facilitate the launch campaigns, the CEDEA has the following facilities and installations:

- Presentation and conference hall
- Mechanical workshop, electrical workshop, health service and warehouses
- Drone and rockets workshops
- Climatic chamber
- Operational accommodation services

**3 - Research domains which can be addressed (refer to ACARE taxonomy <http://www.acare4europe.com/docs/ASD-Annex-final-211004-out-asd.pdf>)**

**4 - Main (or specific) associated measurement techniques**

The CEDEA has been certified by the German Ministry of Defence as a Eurostinger Missile testing centre.

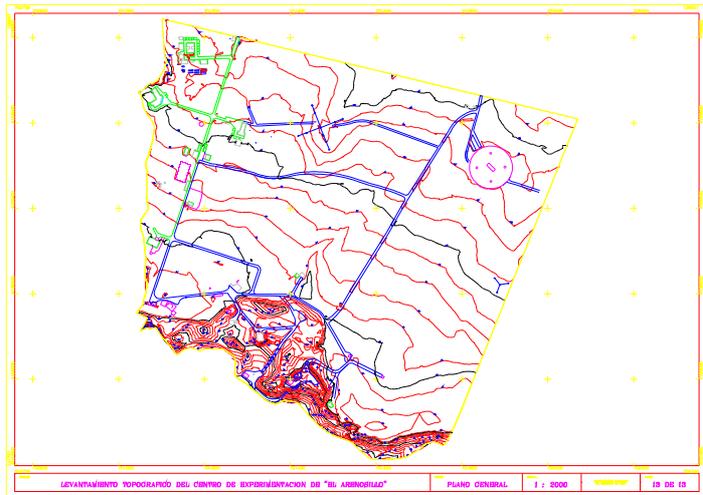
The CEDEA is certified as conforming to Standard UNE ISO 9001-2000 by Lloyd's Register Quality

**5 - Operational status**

- Fully operational (hours available in 2010) **FULLY OPERATIONAL IN 2010**
- Sleeping but possible to reactivate within 6 months (or a reasonable time frame)
- Not used since 5 years or more

**6 - picture**





### Financial elements:

Replacement cost (M€uros)

- Less than 10
- 10 to 30
- 30 to 60
- 60 to 100
- More than 100

### Practices concerning:

Access policy:

contracts , memorandum or others whit Spanish Defence Ministry or with INTA  
free access for research

International Support so much Spanish or abroad Army.  
International support for private companies.

**Origin of information** ('signature'): author and date

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