



Identification of the installation/facility :

Country: Germany
Location (city): Braunschweig
Name of the facility: ATRA (Advanced Technology Research Aircraft)
Date of construction or of acquisition or of main refurbishment: 2012
Owner: German Aerospace Center (DLR)
Contact point: Guido.pluetzer@dlr.de
Internet site: www.dlr.de

Technical characteristics:

1 - Type of infrastructure

Wind tunnel	<input type="checkbox"/>
Propulsion bench	<input type="checkbox"/>
Structures facility	<input type="checkbox"/>
Material facility	<input 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 type="checkbox"/>

2 - Main technical characteristics

Engines	2 x IAE V2500
Max. Take Off Weight	75,5 tonnes
Endurance	up to 2:30 hrs
Max. Operating Altitude	11.800 m (39.000 ft)
Cruise Speed	840km/h
Range	up to 5.700 km

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

- Flight Physics (1)
- Aircraft avionics, Systems Equipment (4)
- Integrated Design & Validation (methods & tools) (6)
- Air Traffic Management (7)
- Human factors (9)
- Innovative concepts & Scenarios (10)

4 - Main (or specific) associated measurement techniques:

- Permanently basic FTI (Flight Test Installation)
 - o Acquisition of ARINC data from basic A/C
 - o Two operator stations for FTE
- Variable cabin layout
- Experimental infrastructure
 - o Power supply for experimental cabin installations
 - o Experimental antennas + dedicated access panel each



- Datalink
- Lettable customer racks for dedicated experimental installations

5 - Operational status

- Fully operational - depending on task to be done.

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: Contract

Support: Regional, national, European

Comments:

Largest civil research aircraft in Europe. Outstanding facility for research in the field of aeronautics.

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