Aeronautical Research Area for Electric and Autonomous Flight Baden-Württemberg

Funded by the Ministry of Economic Affairs, Labour and Tourism of Baden Württemberg
Increasing mobility in the third dimension

600+ eVTOL concepts under development 1)

15,000 aircraft projected for 2035 2)

5,000,000 consumer drones shipped in 2020 3)

2) “The Economics of Vertical Mobility”, Porsche Consulting, July 2021

VTOL  CTOL  Small UAV

Credits: NASA / Lillian Gipson
Welcome to AREA BW

- Framework for systematic testing and demonstration under realistic conditions
- Intended for electric, autonomous and urban flight
- Integrated into the public airspace (ATM & U-Space)
- Shorten the time between the idea and a flight test
Two testing areas

Lahr
Urban flight

Mengen
Autonomous flight

Stuttgart

150 km, 1:30 h

100 km, 1:30 h
Test Field for Urban Flight in Lahr

- Large protected test area
- Substantial workshop equipment and ground station available
- Various aids for testing of UAM vehicles
- ILS approach available

45m x 3.000m asphalt runway

Airplane hangar and office space established and available

6 km² airport area

Aerial image of the Lahr airport by Carsten Steger, used under CC BY-SA 4.0 / Cropped from original
Test Field for Autonomous Flight in Mengen

- Operation procedures established with the airport
- Ground infrastructure installed
- Wide area flight permit for UAV

30m x 700m grass runway
30m x 1.500m asphalt runway

VTOL takeoff/landing spots
Ground infrastructure at Mengen

Aircraft research hangar with office space and workshop/storage

*End of construction planned for 05/2022*

- High-precision GNSS reference systems
- Secure and robust C2 link for BVLOS operations
- DRONIQ: Integrated aerial situation picture (FLARM, ADS-B, radar)
- 22kW charging station
- Active drone radar (work in progress)
Conditions of UAV flight permit

Fixed-wing  Rotorcraft  Lighter-than-air

Multi-kilometer flight area around airport Mengen

Up to 500ft AGL (1000ft AGL within RMZ)

No separate application or SORA required

蹬 BVLOS ✔️  ⛔️  Night flying ✔️

No flight over populated areas and assemblies (with safety margins)
Simple steps to get involved

AREA BW is the operating organization of the test field

- Attractive cost model, moderate fees
- Confidentiality and sensitivity of member IP

Easily gain membership
Take part in safety briefing for use of permit
Make use of infrastructure and flight permits
Coordinate flight tests with ATC and AREA BW
Ensure proper preparation and training of equipment and staff
Test your vehicles and systems

1) Contact us for detailed information
Enabling UAV testing in Baden-Württemberg