

## Pressemitteilung

Langen, 02 July 2024

### **DFS Aviation Services and Nanjing Research Institute of Electronics Engineering successfully complete joint research and development project**

**DFS Aviation Services GmbH (DAS) and DFS Deutsche Flugsicherung GmbH (DFS) have successfully completed their joint research and development project on Trajectory Based Operation (TBO) and Free Route Airspace (FRA) for the Nanjing Research Institute of Electronics Engineering (NRIEE) in China.**

In a collaborative research agreement, DAS and DFS conducted research from December 2020 to March 2024, focusing on trajectory-based operations and free route airspace. Research results regarding "Trajectory Prediction and Aircraft Performance Modeling" specifically, with an emphasis on climb trajectory prediction, were developed and shared as part of the project. The analysis included an examination of the current implementation status of trajectory-based operations in China and Germany, the identification of development opportunities in China, and a forward-looking perspective.

Concurrently, an intensive study was conducted on predicting vertical trajectories from take-off to the top of climb. DFS and NRIEE experts collaborated to present, discuss, and refine results on the flight performance model based on a physical total energy model. The model underwent validation at the airports in Baiyun (China) and Munich.

Such models can be utilized for future air traffic control support systems, enhancing predictability, capacity, and safety while reducing air traffic controller workload. A summary of the findings was published in the DFS magazine "Innovation im Fokus 02/2023" and included in the collection of the German National Library.

In April 2024, DAS and NRIEE signed a new contract focusing on simulator coupling, fast-time simulations, and flight efficiency analysis.

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**Boilerplate:**

**DFS Aviation Services GmbH (DAS)** is a subsidiary of DFS, the German air navigation service provider (ANSP). It employs more than 400 members of staff worldwide. DAS is a certified ANSP, provides air traffic services at regional airports in Germany and markets its ATM products and services worldwide. Its customers include air navigation services providers, airport operators, airlines and aeronautical authorities from around the globe.

Through its UK subsidiary, Air Navigation Solutions Ltd. (ANSL), DAS is also responsible for the provision of air traffic control at Edinburgh. In the Middle East, the subsidiary DFS Aviation Services Bahrain Co WLL supports the local air navigation service provider. In Asia, DAS maintains a branch in Singapore. In South America, DAS has a branch office in Lima. DFS Aviation Services additionally offers turnkey remote tower solutions via its Joint Venture Frequentis DFS Aerosense GmbH, together with Frequentis AG from Vienna.

[www.dfs-as.aero](http://www.dfs-as.aero)

**Pressekontakt:**

DFS Aviation Services GmbH

Carolin Walaski

Tel: (06103) 3748 - 142

[Carolin.walaski@dfs-as.aero](mailto:Carolin.walaski@dfs-as.aero)