

SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)  
Advanced Systems (3)

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THE FLIGHT EXPERIENCE OF DFH-4 COMMERCIAL SATELLITES

**Abstract**

DFH-4 Bus is a common used communication satellite platform with large capacity and long lifetime, which is the key satellite bus of China Academy of Space Technology (CAST), promoting to domestic and international commercial satellite market. The service life of DFH-4 satellites is 15 years with 5000-5200kg launch mass, and it can accommodate 450-600kg payload mass with 6-8kW payload power. Up to now, DFH-4 platform has successfully launched five commercial telecommunication satellites, More than 200 transponder-years have been accumulated, and the earliest satellite Venesat-1 has already reached more than three years lifetime in orbit. All the five DFH-4 satellites are operated normally since in-orbit delivery; all subsystems are in good conditions. The attitude are stable, the power and propellant can meet the budgets. The hardware and software of the spacecraft work normally. The flight experience of these five DFH-4 commercial satellites is described, including general performance, payload configuration and in-orbit operation. Some key features like solar array output power, battery performance, attitude control accuracy, in-orbit temperature and propellant budget are displayed. DFH-4 Bus satellites have good flight experience and mature heritage, can provide high capacity and high reliability satellite solution with high performance for the customer.