The commercial satellite network is very congested yet a team including BAE Systems has experimented with a rarely used frequency within the Ka band to send compressed packages of data which could be used to support future unmanned aircraft operations.

1. Engineers at BAE Systems hooked up their latest UAV Mission System to the EADS Astrium Air Patrol Ka band Satellite Communications System, which was in turn bolted down to a ‘Rocking Bed’. Programmed with the UAV flight profile it appeared to the satellite as if it were actually on-board a UAV.

2. Engineers were able to use the Air Patrol system to communicate large amounts of mission and control data over the Ka band satellite system between the UAS Control Station and the UAV Mission System.

3. The successful testing demonstrates the potential to use the Ka band for UAV missions in the future.