Hawker Beechcraft King Air B300CER

NOAA's New Emergency Response and Remote Sensing Aircraft

NOAA OMAO/AOC has procured a replacement to its Cessna Citation (C550) aircraft in 2009. The Citation was over thirty years old at the time of its retirement and had been used to carry out NOAA National Geodetic Survey (NGS) various aerial remote sensing missions. The new aircraft is equipped with specialized instruments as part of the Integrated Ocean and Coastal Mapping (IOCM) initiative. State-of-the-art digital imaging and topographic Light Detection and Ranging (LIDAR) systems is the standard instrument suite on board, offering the ability to concurrently collect spatial and spectral data.

A comparison between the basic aircraft specifications:

	Citation II	**King Air 350CER**
Empty Weight:	8,700 lbs	10,300 lbs
Max Gross Weight:	14,500 lbs	16,500 lb
Service Ceiling:	43,000 feet	35,000 feet
Max Cruise Speed:	340 knots	303 knots
Range (incl IFR reserve):	1,200 NM	2,400 NM
Endurance	5 hours	9+ hours
Dimensions (LxWxH)	47' x 52' x 15'	47' x 58' x 14'

This new King Air aircraft significantly enhances NOAA's operational capability. Long-range and extended duration missions that were impossible to accomplish using the Citation are achievable with the King Air. Some key benefits are:

- Increased reliability for Emergency Response and other NOAA missions
- Decreased operating costs
- Ability to take off and land from shorter runways
- Reduction of NOAA's carbon footprint
- Multi-mission capability to support other NOAA programs if needed
- Ability to support long range / high endurance missions including Pacific Islands support
- Improved sensor performance due to custom "glass-free" instrument port configuration
- Up to date avionics including:
    - IFR certified GPS
    - Traffic Collision Avoidance System (TCAS)
    - Ground Proximity Warning System (GPWS)
    - Moving Map / multi-function displays electronic charts
    - Solid state Attitude Heading Reference System
- Superior COM ability including SatPhone, as well as P25 VHF, UHF, and HF radios
- Automatic Flight Following (ground tracking) system
- Convex observer windows to provide visual survey capability
- Large cargo door to enable installation of completely assembled bench-checked systems
- Highly customizable instrument integration capability including replaceable instrument panels, multiple instrument rack locations, and multiple sensor port configurations