



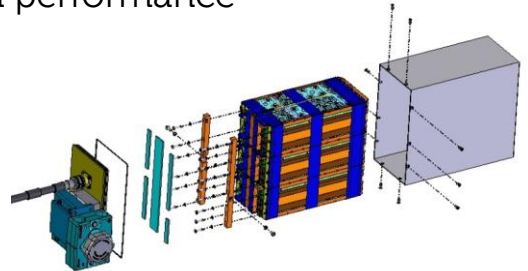
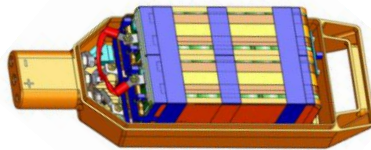
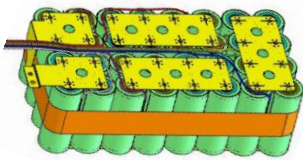
avion power

...leading the way in power security

Avion Power's Modular Battery System has an Air Worthiness Release and the 160th SOAR has flown it since 2010.

Modular Battery System (MBS)

- Avion Power's Modular Battery System is the core technology in our main aircraft batteries, the Voyager battery, and our weapons power systems
 - Cells are grouped into modules
 - Electronic safeguards and sensors are added
 - Modules are grouped into batteries
 - Testing occurs at every step
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- Result: Optimized power, capacity, and performance



Air Worthiness Release (AWR)

- Performance testing proved operational readiness
- Safety testing proved tolerance of abusive conditions, faulty usage, and violent destruction
- Environmental testing proved tolerance of destructive environmental conditions

Track record

- Our main aircraft battery has powered the 160th's MH-47 Chinooks since 2010
- Hundreds of batteries delivered
- Fewer than 3% needed repair





Performance testing

Ambient temperature	Repetitive shallow discharge
Cold temperature	Repetitive deep discharge
Hot temperature	MELB turbine start

Safety testing

Short Circuit. BMU and protective circuit disabled	Abnormal voltage spike
Short Circuit. BMU and protective circuit active	Crush
Over-charge and discharge. BMU disabled	Rod puncture
Over-discharge and charge. BMU disabled	Aging cycling
High temperature	Gunfire penetration

Electrical safety device

Environmental testing

Temperature, altitude, humidity	Temperature shock
High temperature storage	Rain
Low temperature storage	Humidity
Altitude / transportation storage	Fungus
Explosive atmosphere	Salt fog
Shock crash hazard	Blowing sand and dust
Shock functional	Acceleration
Shock bench handling	Vibration