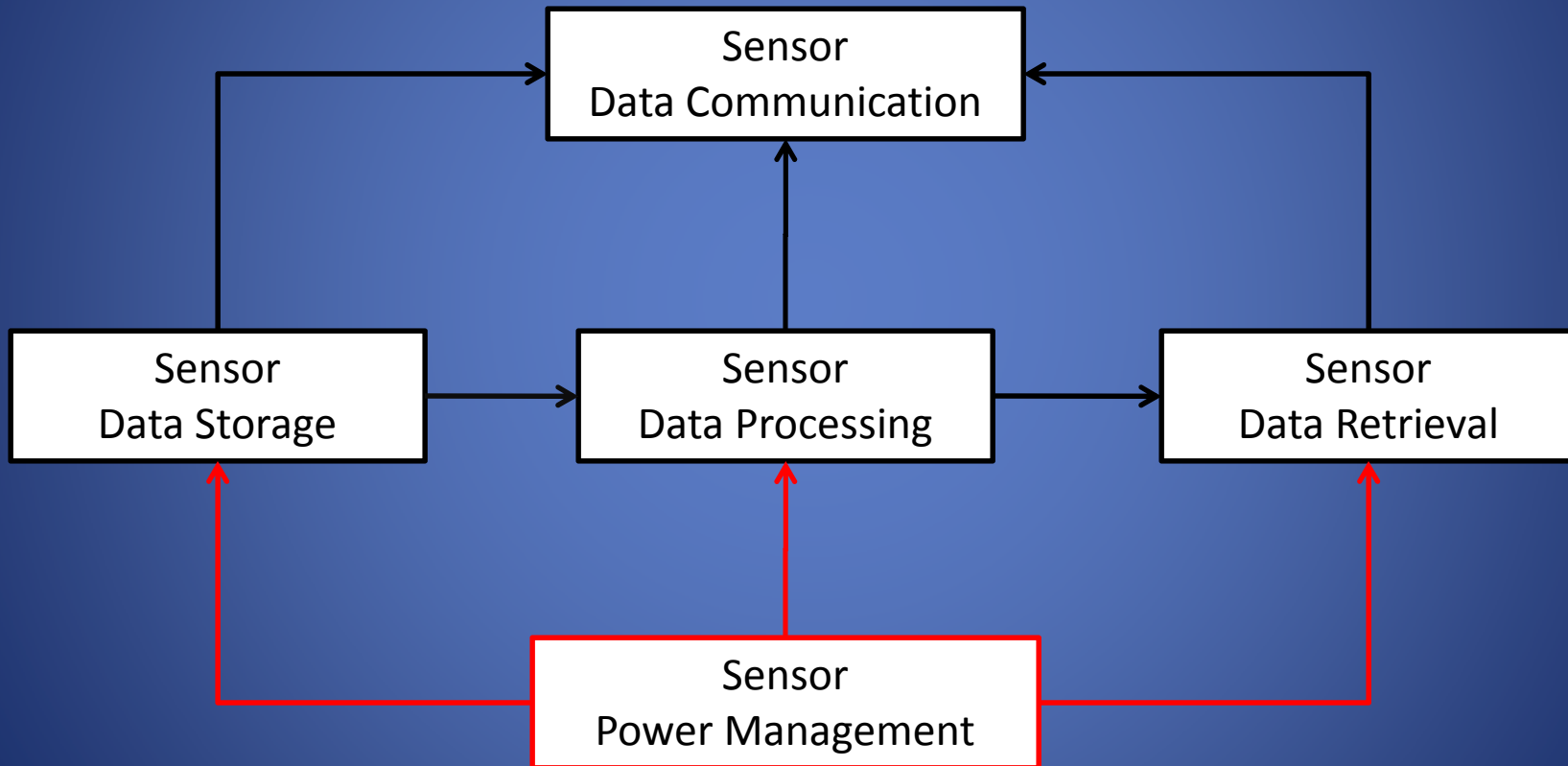


Health Monitoring System for Aircraft Systems Using Smart Sensors Networks



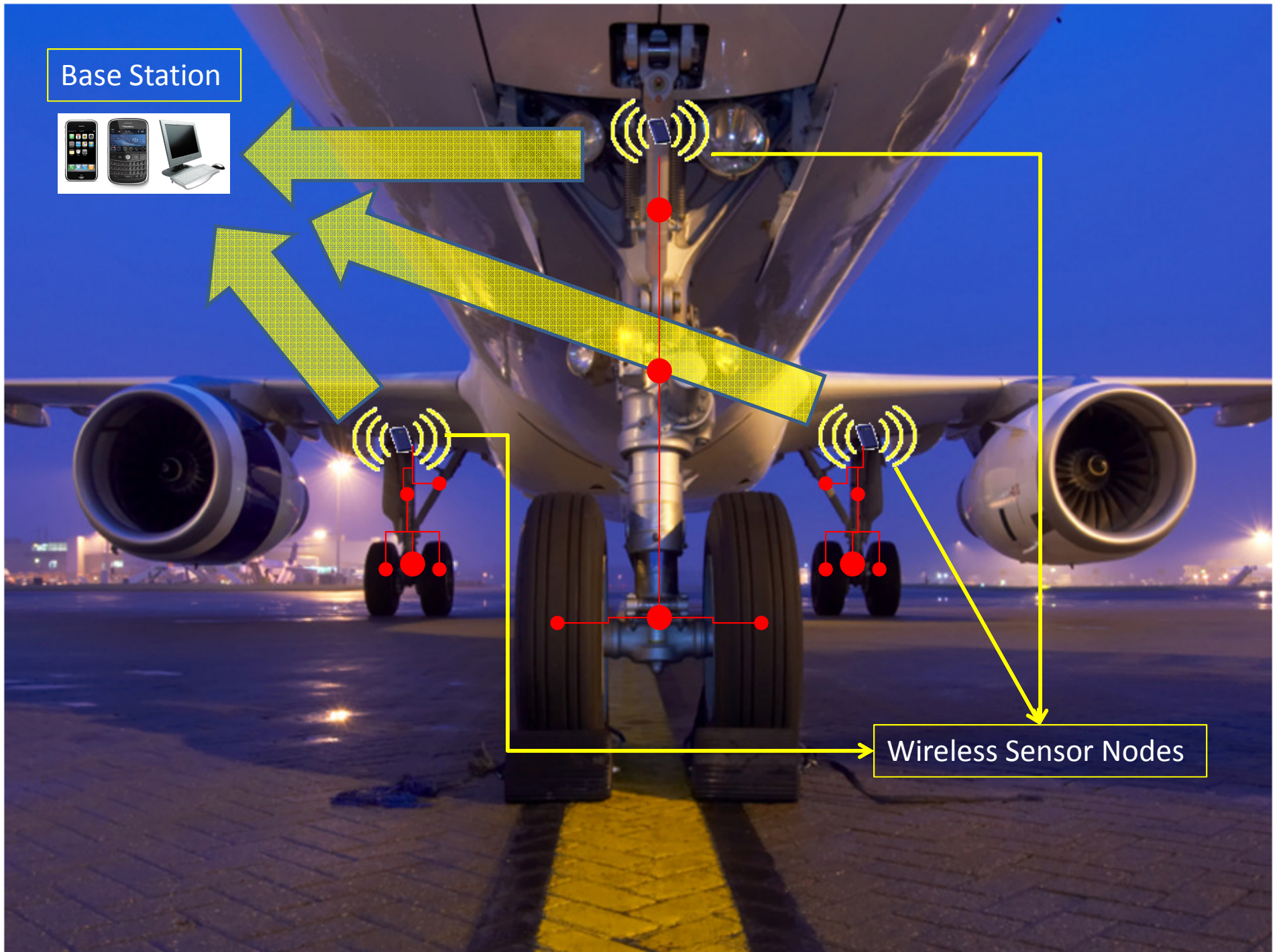
Sensor Networking



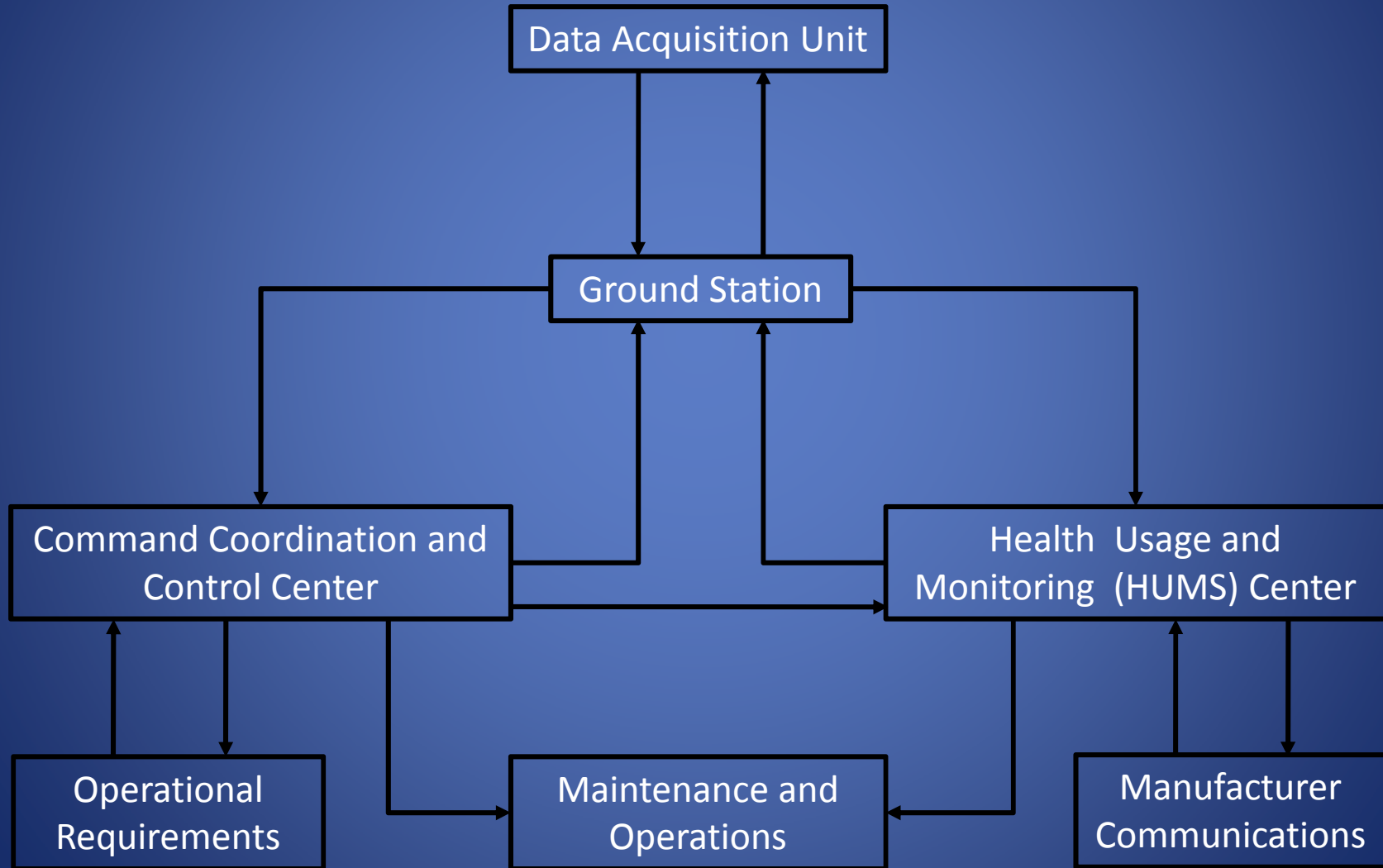
Base Station



Wireless Sensor Nodes



Architecture of the Health Usage and Monitoring System



Top Level Requirements

1. Fault detection, diagnosis, and isolation. The algorithm must be capable of detecting and isolating faulty condition of aircraft systems at the component level.
2. Sensor data and sensor selection: Type of sensors and the associated characteristics of the data transmitted must be compatible with the algorithms.
3. System must be scalable, reliable and meet all environmental requirements.