HAPS Challenge

Footnotes

[1] Stratospheric

[2] Runway independent operations

[3] To meet safety and operational effectiveness objectives, allow deployment remotely, to follow targets or maintain a position

[4] Includes platform, mission and flight system and ground segment

[5] See https://smartsatcrc.com/partners/smartsat-aurora/

[6] Total payload should be at least 10kg. If this cannot be done, a design rationale for the selected payload must be provided. Payload suite should include:

- Redundant long-Range (100+km) and high-bandwidth (>5mbps) communication to ground (via direct LOS or bent pipe)
- Redundant low-bandwidth radio (telemetry only)
- High resolution (>50mpx) colour camera
- Thermal Camera
- LWIR camera and/or Hyperspectral camera
- Barometer
- Temperature sensor
- High precision IMU and Gyro unit
- Jetson Nano central computer
- GPS

Energy source for 7+ days of operation