# D.A. HUGINN Data Considerations

## GCS Requirements:

(File type, size, DEM included, etc.)
>Existing basemaps with sat imagery for autopilot side;
>GeoTIFF LZW Compression
> DPI: <1200
> World file: .TFW
>PRJ:  WGS84 Projected Zone ?(set to operating zone)?  preferred, but it will project on the fly
>DEM: .dt2 file is preferred - Exports from Global Mapper works well
> Like aerial image with 50% transparent hillshade over the top
**Ground Control Station**
- Waypoint entry
    - Manual - as DDM

## Site Selection Requirements:

(Antenna height, preferred flight altitude, takeoff/landing area, etc.)
Antenna height 5-20' Antenna,
Preferred flight levels - >1000 agl,
Launch and Recovery size - 100'x100',

## Data Processing:

(Format, conversion needed, FMV ready?)
MISB FMV Trilium camera, Still Geotag TIFF, working on PTs, Lines, Polys as KML

**Sensor Considerations**
GCS Display
- Displays where/how for which sensors?
    - Lat/Long display - DDM Sensor center - On standard Payload screen
    - Gimbal angle for tilt and pan displayed - On standard Payload screen (degrees field of view. Elevation, azmuth, FOV
- Basemap displayed on Sensor computer?
    -  Same as GCS Map should work (they are checking on it)
- Elevation model required - DEM as .dt2??

Gimbal Control
- Down to 2.4 degree FOV

Sensor Specs
- For each sensor:
    - Megapixels - E/O - 2.1MP  IR - 640x580
    - Resolution height and width (pix)
    - Sensor height and width (mm)
    - Focal length - E/O - 15mm - 75mm, IR - Digital 25mm
    - IR
        - Radiometric - Yes at the center pixel
- For multiple optics
    - Boresighted - No

Data Collection
- Video
    - Dual streams - Yes, but it only displays 1 at a time.
    - Streamed packet size?
    - Closed circuit or IP - IP
- Stills
    - Ability to collect stills while collecting video - Yes, Georeferenced (center pixel)
    - Stills watermarked - yes

Storage
- Files archived on display device and/or on board - Both