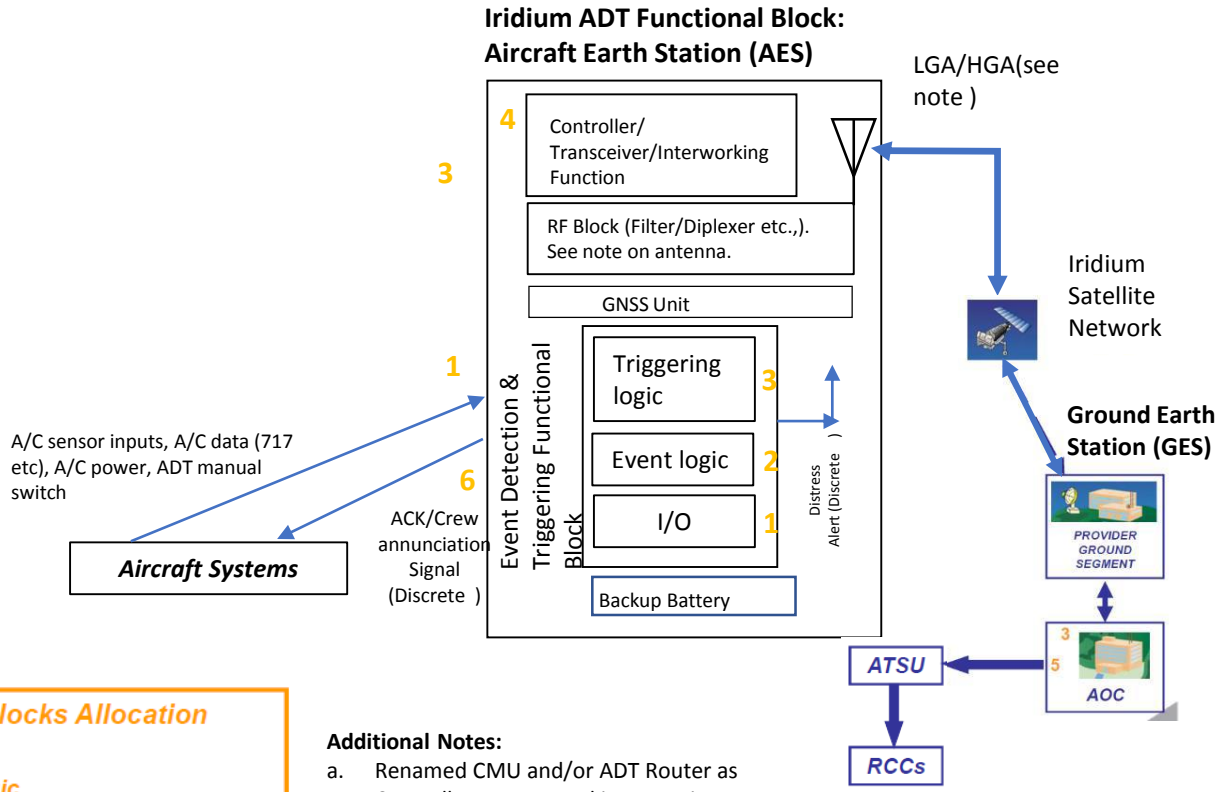
ADT-Satcom Iridium Architecture, Ver 4.0

Option 2



ADT Functional Blocks Allocation

1 – Aircraft State Function

2 – Distress Detection Logic

3 – Triggering criteria logic

4 – Distress Tracking Transmission

5 – Distress Report

6 – Flight crew Feedback

Additional Notes:

a. Renamed CMU and/or ADT Router as Controller or Interworking Function.

b. Data Bus (one-way) to Iridium *ADT* enables external GNSS source and additional Abnormal and Flight Data Streaming function

c. 2-way coms between AOC and ADT to support ground-based Distress.

d. Note 1: LGA/HGA Antenna: (1) With Block 1, LGA. (2) With certus, LGA (RF block builtin to iridium transceiver function) or (3) With Certus, HGA (RF block builtin to antenna)

Note 2: It is recommended the link, A/C systems → ADT is unidirectional diode to prevent potential security breach from Ground systems and/or AISD domain. The only exception shown is ADT status going to flight deck (A/C systems domain). This exception will have to be reviewed as a team on how the potential security risk from AISD domain will be addressed.

Note 3: Ground based trigger can be used in the case of non-cooperative crew (malicious or incapacitated). This is coupled with the capability to cancel the trigger.