BLUEsat Progress Update 2

# Project Plan Progress

## 2.1 Amateur Radio Licensing and Testing

* C. Webb and T. Nguyen are applying for new IARU frequency allocations, with bands that will be easily tune-able from current radio models
* V Nayyar, C Mendoza and D Jedrychowski progressing through WIA advanced licence course.

## 2.2.3 Bus Board Routing (Flagged)

* Bus integration board is still being routed. Currently behind schedule by 3 weeks.
* Completion expected by 17/03/2012

## 2.3.1 Software Application Level Development

* AX.25 and NRZI completed and proofed at software level
* Issues regarding signal/voltage levels currently being addressed
* Architecture for Communications task with deliverables have been specified

## 2.3.4 Beaglebone Design Integration

* No further progress

## 2.3.5 Battery Charge Design Finalisation

* PCB supplied out of specification. Replacement PCBs received and populated. Awaiting testing

## 2.3.7 Solar Panel Routing and Mounting

* Raw panels sourced and purchased. Awaiting delivery
* Cells are to be cut to size that fits existing design.

## 2.4.1 Bent Pipe RF testing

* Running in tandem with software development. Basic repeating achieved.
* Currently Testing data retransmission

## 2.4.2 Telecommand Testing

* Commands specified and listed. Awaiting testing.

## 2.4.3 Regulator and LDO characterisation

* Test plan generated. Awaiting manpower to free up from routing

## 2.5.3 Thermal Environmental Research

* Environmental simulation results put forward to team. Expected that the satellite will fall below operating temperature for 2 hours. Does not seem to reach maximum storage temperature
* Research regarding minimum storage temperature of BOM for entire satellite has progressed
* Thermal inertia of the satellite is to be added into calculations
* Insulation discussed. Further testing needed before further research to take place

# Flags

* 2.1.3 is behind schedule and 2.1.4 is subsequently on hold. Sufficient points (2.4.4 and 2.4.5) are currently ahead of schedule. Focus is currently being put on pushing 2.1.3 and 2.1.4 for completion