

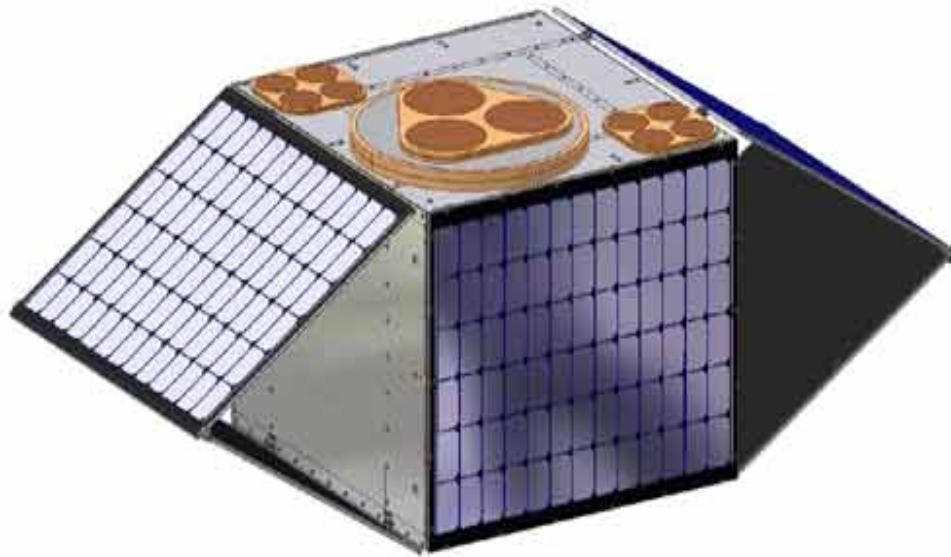


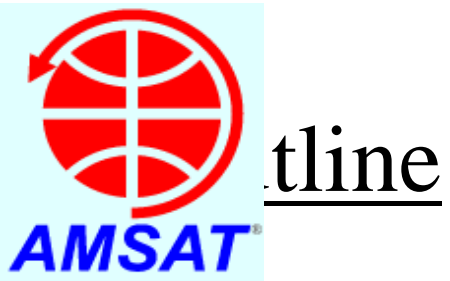
Eagle Project Update



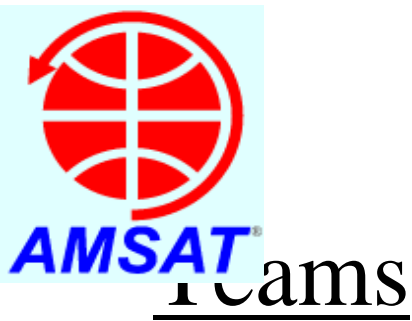
James A. Sanford, PE
WB4GCS
Eagle Project Manager

Our Vision is to deploy High earth orbit satellite systems that offer daily coverage by 2009 and continuous coverage by 2012...

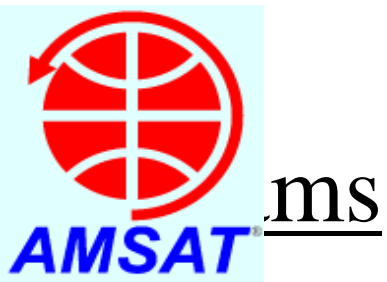




- Teams
- Functional Requirements
- Block Diagram
- Progress to date
- Financials
- Schedule
- Needs



- Project Management **WB4GCS, KD4CNS, W4HFZ**
- Chief Technical Officer **W2GPS (acting)**
- Structure/Thermal **WD4FAB *WANTS HELP***
- Launch **KU40S, W3IWI**
- Guidance/Control **N2WWD**



- Sensors: N1AL
- Power W5DID
- Propulsion WA4NFY, W8FGV, N2WWD
- Housekeeping KB0G, N0ADI, KK7P
- Antennas WA4NFY
- “PAYLOADS” N4HY, N8FGV, W3IWI
- GPS W5DID
- CEDEX VE3FRH
- Cameras W8GSM
- Command, Control, Telemetry W4EPI, W4SM
- Radiation N7HPR



Functional Requirement Highlights

(As of 17 July 04)

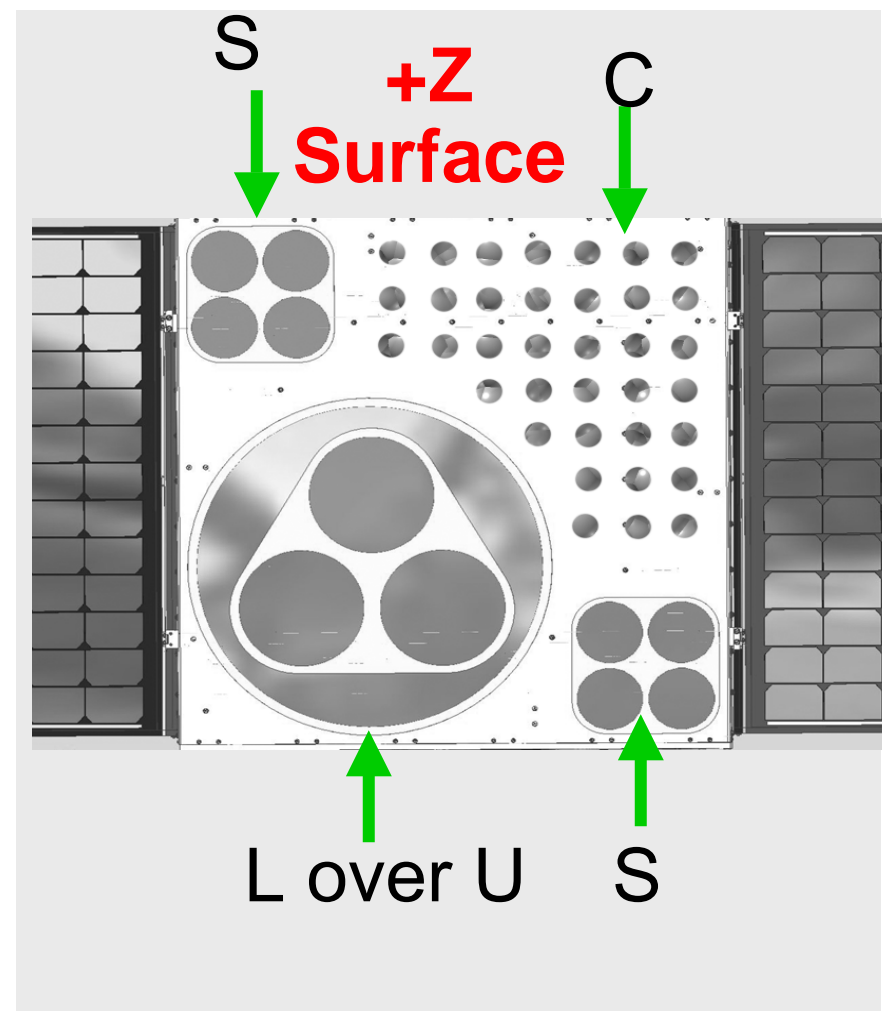
- V-Band TX 20KHz (maybe 50KHz)
- 2 S-Band TX 100 Khz
- C-C band TX/RX
 - Wideband digital
- U-band and L-band 100 Khz RX
- *GOAL: Simultaneous Ops on all Bands*
- *Check out the full list on:*

www.amsat.org

S
O
F
T
W
A
R
E

Functional Requirement Highlights

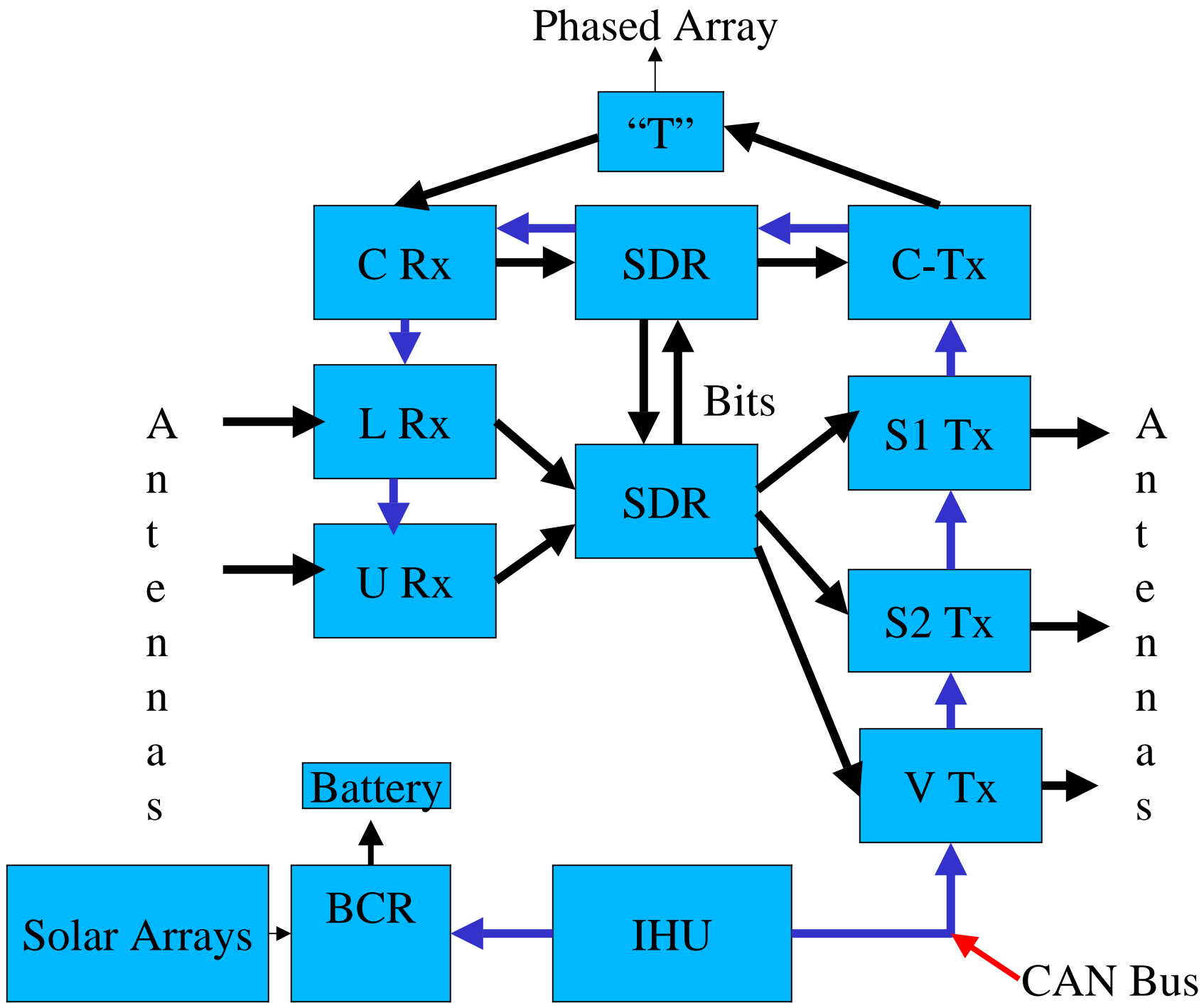
- Antennas
 - High Gain +Z
 - U, L, S, C
 - Omni -Z
 - V, U, L, S
 - Omni +Z
 - U, L, S
- Housekeeping
 - IHU-3
 - CAN-Do! Information Buss



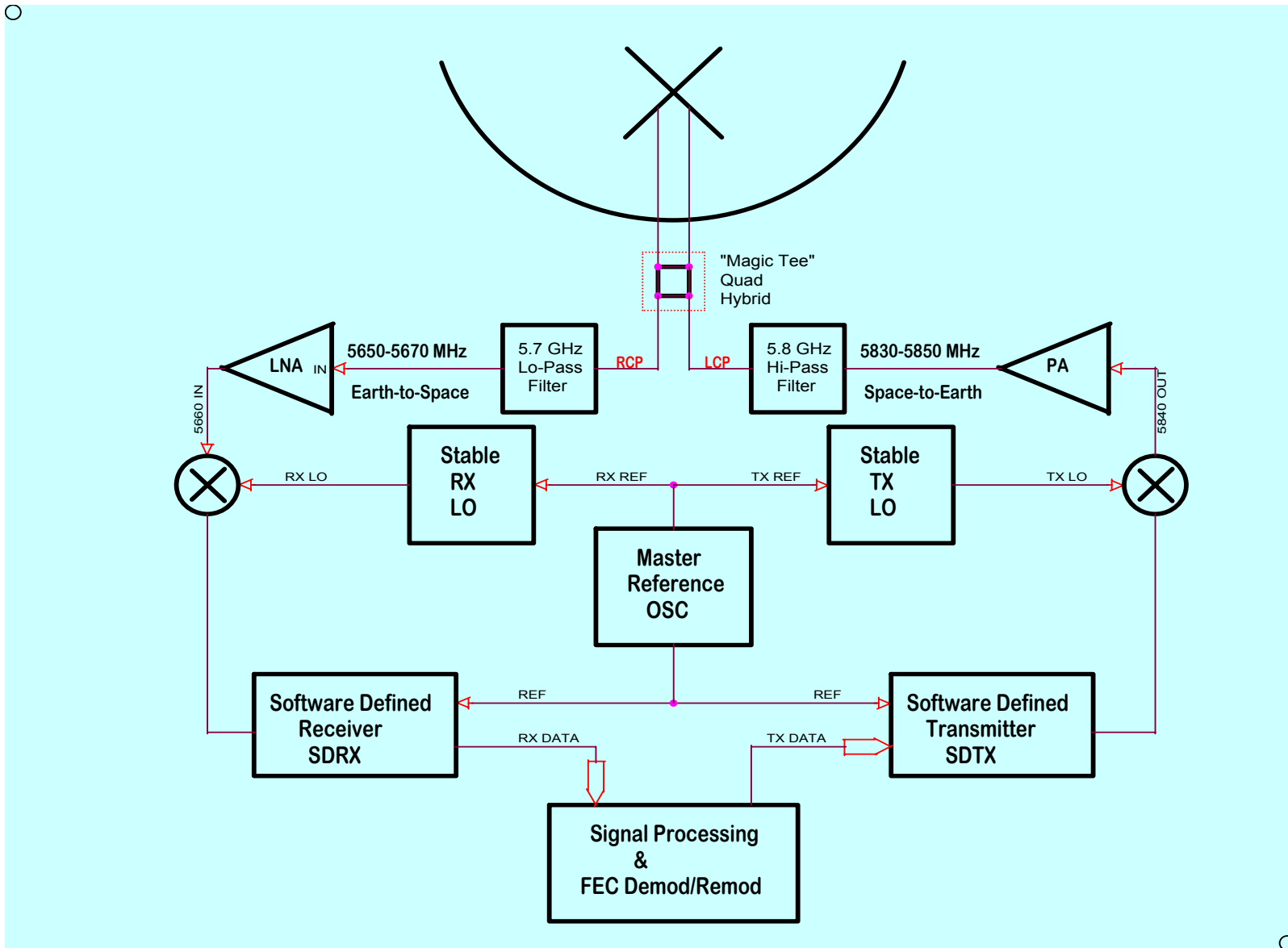


Progress to Date

- Structure
- SDR
- C-Band
 - This is *BLEEDING edge technology*
- *CAN-Do!*
- *IHU-3*



C-C Rider





Financials



- Costs avoided
 - Member LOAN of SDR and transverter for SDR prototype
 - Private purchase of C-band evaluation modules by member
 - Discount on software purchase
- Funds raised in 2005
 - About \$2000



Financials

Item	Budget 2005	Expended 2005
Struct/Thermal	\$1500.00	356.21
CMD Team Tvl	1500.00	0.00
Proj Mgmt S/W	500.00	200.00
Proj Mgmt Tvl	14,000.00	0.00
Sensors	500.00	1000.00
Housekeeping	8000.00	549.74
Payloads	5000.00	1200.00



We Still Need

- **Members (who have you recruited today?)**
- **Volunteers (range of skills) *Form on Web***
- **Peer Reviewers**
- **Design Reports (documentation)**
- **Test Plan Input (documentation)**
- **\$\$**
 - **Total cost estimates \$300K - \$600K**
 - **PLUS LAUNCH COSTS!**



Schedule

- 2005
 - Continue concept development, exploration, and prototyping
 - *U/V, L/S, U/S SDR prototype will be demonstrated at Symposium in October!*
 - **Develop detailed spending plan & schedule**
- 2006
 - Begin component construction/testing



REMEMBER

This
IS
Rocket
Science!