## **ARISS-Russia Report**

Sergey Samburov, RV3DR AMSAT-R V.P. Manned Space

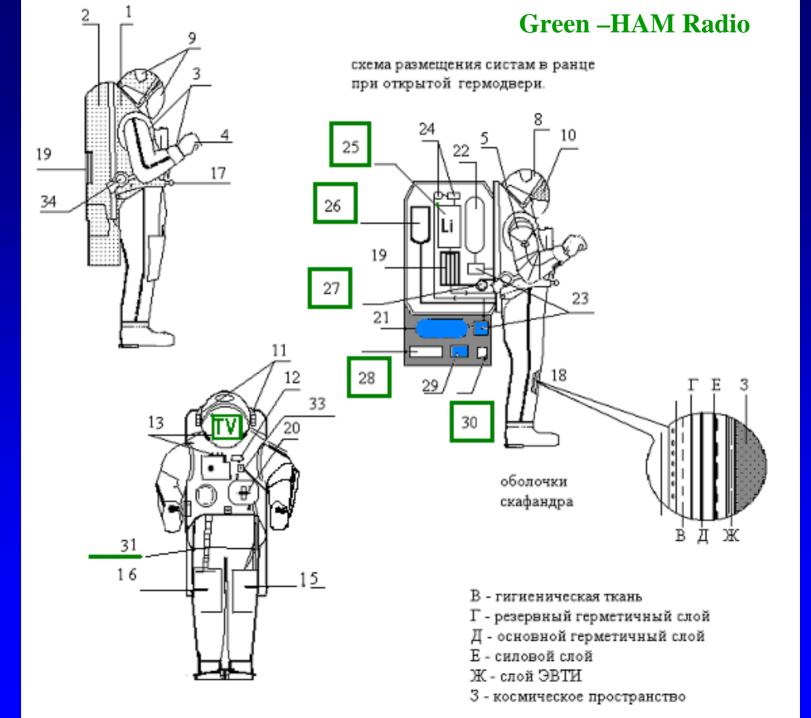
22<sup>nd</sup> AMSAT Space Symposium 9 October 2004

#### Russia Hardware Development Opportunity

- To commemorate the 175<sup>th</sup> anniversary of the founding of the Bauman Moscow State Technical University, where a number of the Energia engineers went to school, the Russian team would like to launch a special satellite
- The intent is to deploy this satellite off the ISS in the November 2005 timeframe as part of this commemoration
- Microsat-class satellite was originally proposed
- Concept has evolved to positively support ISS program and to improve the team's ability to deploy this satellite

# ISS Housekeeping & the Evolved Satellite Concept

- Cargo space on ISS has reached a crucial stage
- Old, outdated items being scrutinized for potential removal from ISS
  - Progress trash
  - Thrown overboard during EVAs
- Several Russian Orlan EVA spacesuits being considered for disposal
- ARISS-Russia team sees this as an opportunity
  - Help the ISS cargo space
  - Commemorate the 175<sup>th</sup> anniversary of the University
  - Provide the ham radio community and school children a unique satellite opportunity
- Concept: Outfit an Orlan EVA spacesuit with amateur satellite equipment
  - Pressurized
  - Thermally protected
  - Cosmonauts deploy "Suit-sat" for months of satellite operation



#### Orlon Suit Photos







## Orlon Suit Photos



#### **Conclusions**

- Unique, high visibility satellite opportunity exists for ham radio community
- Concepts need to be solidified quickly since this human spaceflight launch opportunity is one year away
- ARISS-Russia will continue to evolve this concept through the ARISS project selection and use committee
- Your ideas and support is encouraged