NRL BAA Announcement # 82-15-01



SPACECRAFT & SPACE SYSTEMS TECHNOLOGY

The Spacecraft Engineering Department (SED) at the Naval Research Laboratory (NRL) performs research and development by applying advanced technologies and techniques to provide new space capabilities that address critical Navy, DoD, and national needs. The emphasis at the NRL's SED is incubating critical technologies and assembling them into systems that provide relevant and often revolutionary new space capabilities. Past examples include first flight of solar cells, atomic precision clocks leading to the NAVSTAR Global Positioning System (GPS), and the first tactical downlink of space data and onboard processed products to Tactical Receive Equipment (TRE). Each of these systems radically improved operational capability and each was enabled by innovative, system application of new technologies. Therefore, NRL's SED seeks a broad range of innovative space systems technologies included associated and enabling ground systems technologies.

NRL's SED performs research and exploratory development in, but not limited to, the following areas: spacecraft payloads, spacecraft structures; spacecraft mechanisms; spacecraft guidance, navigation, and control; spacecraft robotics; spacecraft thermal control, spacecraft power systems, spacecraft propulsion systems, advanced materials for spaceflight use, on-orbit environment monitoring, ground and flight software, spacecraft electronics, spacecraft ground systems, integration and testing, operational user interfaces, and space integration into operational tiered systems. SED projects range from basic theory and component technology development to full space systems development and operations.

Address White Papers (WP) to <u>code8200baa@nrl.navy.mil</u>. Allow one month before requesting confirmation of receipt of WP, if confirmation is desired. Substantive contact should not take place prior to evaluation of a WP by NRL. If necessary, NRL will initiate substantive contact.