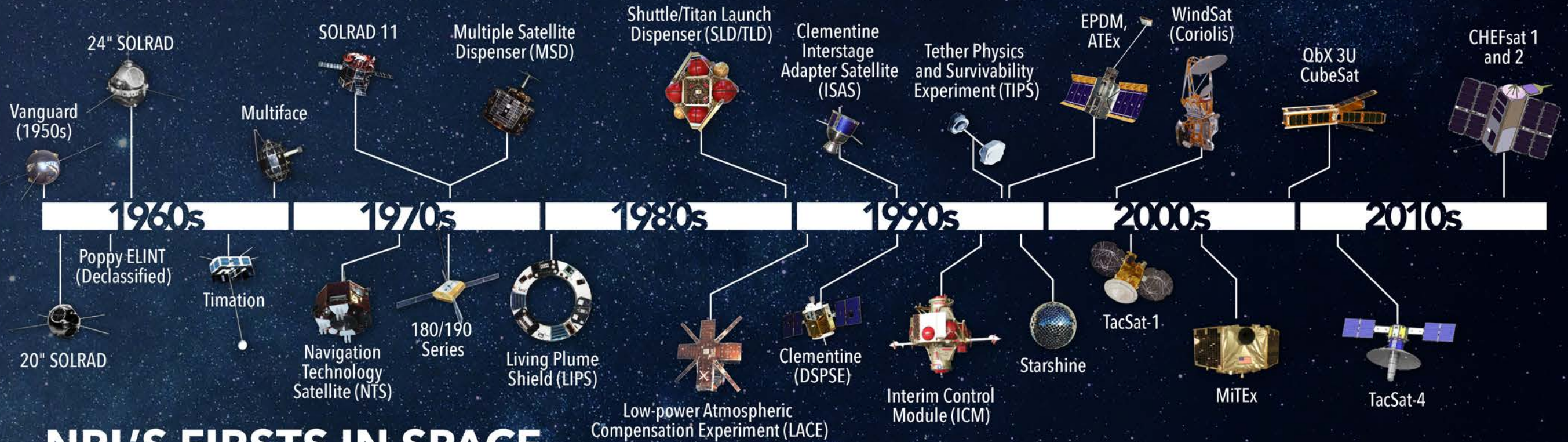


Naval Center for Space Technology: Developing New Capabilities with Operational Impacts



NRL'S FIRSTS IN SPACE

A HISTORY OF ADVANCED TECHNOLOGY TRANSITIONS TO OPERATIONS AND INDUSTRY.

- 1st Satellite Control Ground Station (Blossom Point, 1956)
- 1st Earth Observing/Weather Satellite (Vanguard 2, 1959)
- 1st U.S. Recon Satellite (GRAB, 1960)
- 1st Multiple Satellite Launch (Solrad 1, 1960)
- 1st Space Object Tracking System (Naval Space Surveillance System, 1961) Transferred to U.S. Air Force Space Command in 2004
- 1st U.S. ELINT System (POPPY, 1962-1977)
- 1st Observatory on the Moon (Far UV Camera on Apollo 16, 1972)
- 1st Timing and Navigation Satellites (TIMATION and NTS Series, 1964-1977) Became NAVSTAR GPS
- 1st Tactical Broadcast From Space (LiPS Series, 1980s) Evolved Into TADIXS-B and IBS
- 1st Full Lunar Mapping, and Water Ice Detection (Clementine, 1994)
- 1st Ocean Wind Vectors Obtained Passively From Space (WindSat, 2003)
- 1st Operationally Responsive Space (ORS) Satellite (TacSat-1, 2004)
- 1st to Fly Many Enabling Components Such as Solar Cells and Atomic Clocks, Cold Gas Thrusters, Onboard Data Storage, 3 Axis Stabilization, Rechargeable NiCad Batteries

Theory without practice is intellectual play, practice without theory is blind