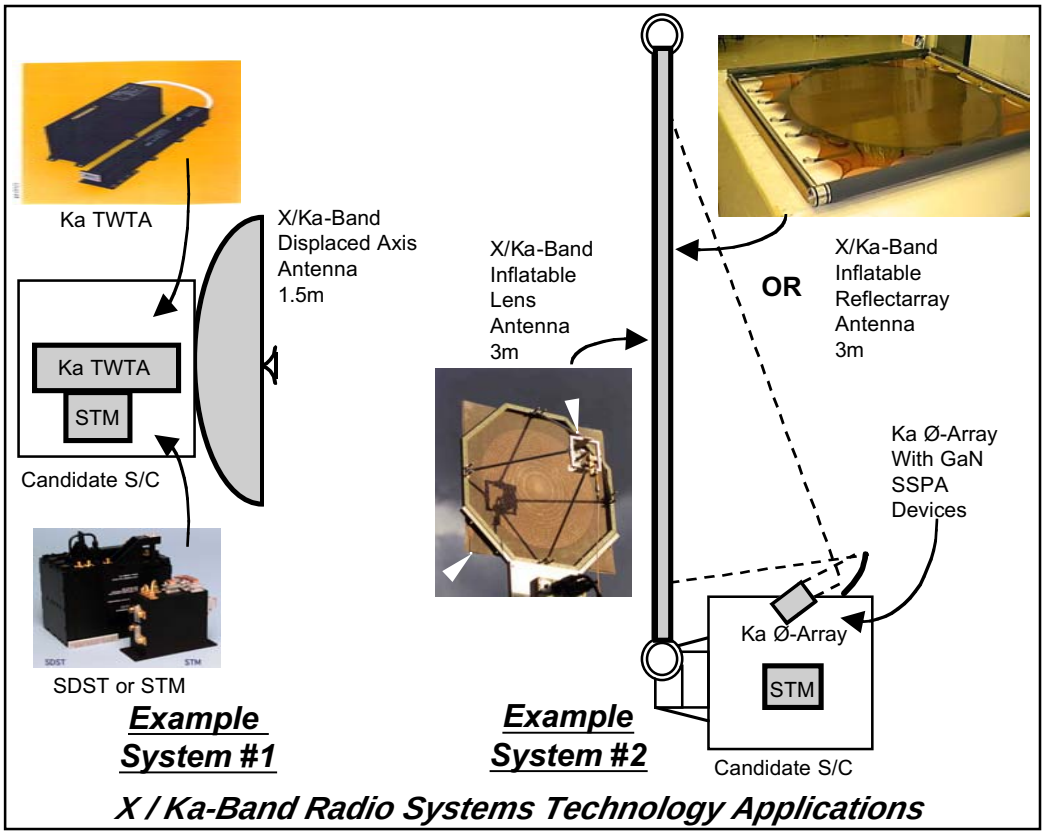
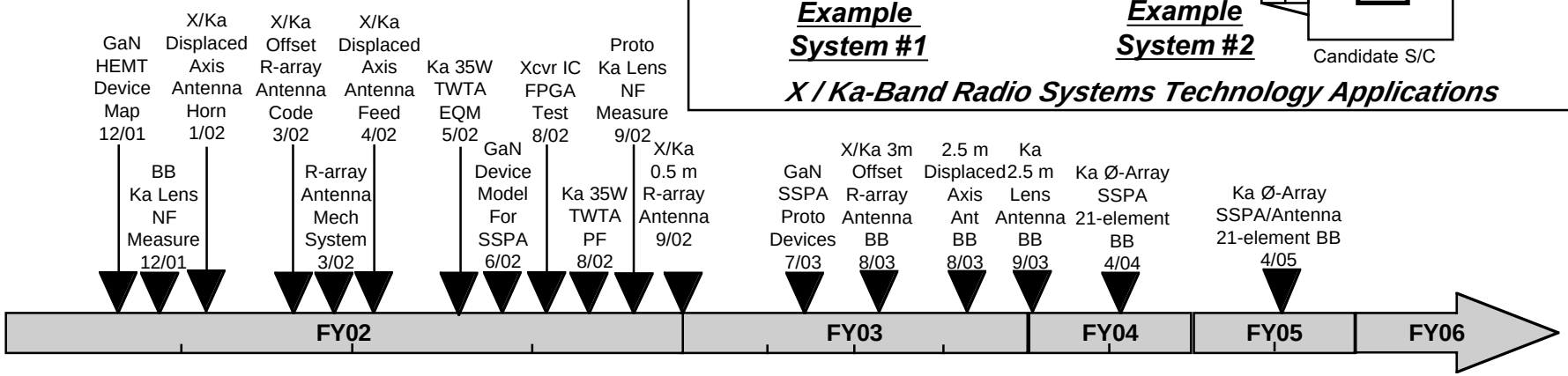
Spacecraft Radio Systems

- **Overall Objective**
  - Achieve significant performance improvements in spacecraft telecom hardware, particularly with improved downlink telemetry data return, while providing greater flexibility, and assured compatibility with the DSN.
- **Goals and Products**
  - Ka-Band Power Amplifiers
    - 35 W TWTA EM and Protoflight units
    - 21W Phased Array power amplifier feed w/GaN devices
  - X/Ka-Band inflatable antennas
    - 3 meter reflectarray breadboard
    - 1 meter lens antenna breadboard
  - X/Ka-Band high efficiency antenna
    - 1.5 meter Displaced-Axis EM
  - Micropower Transceiver algorithm and IC development