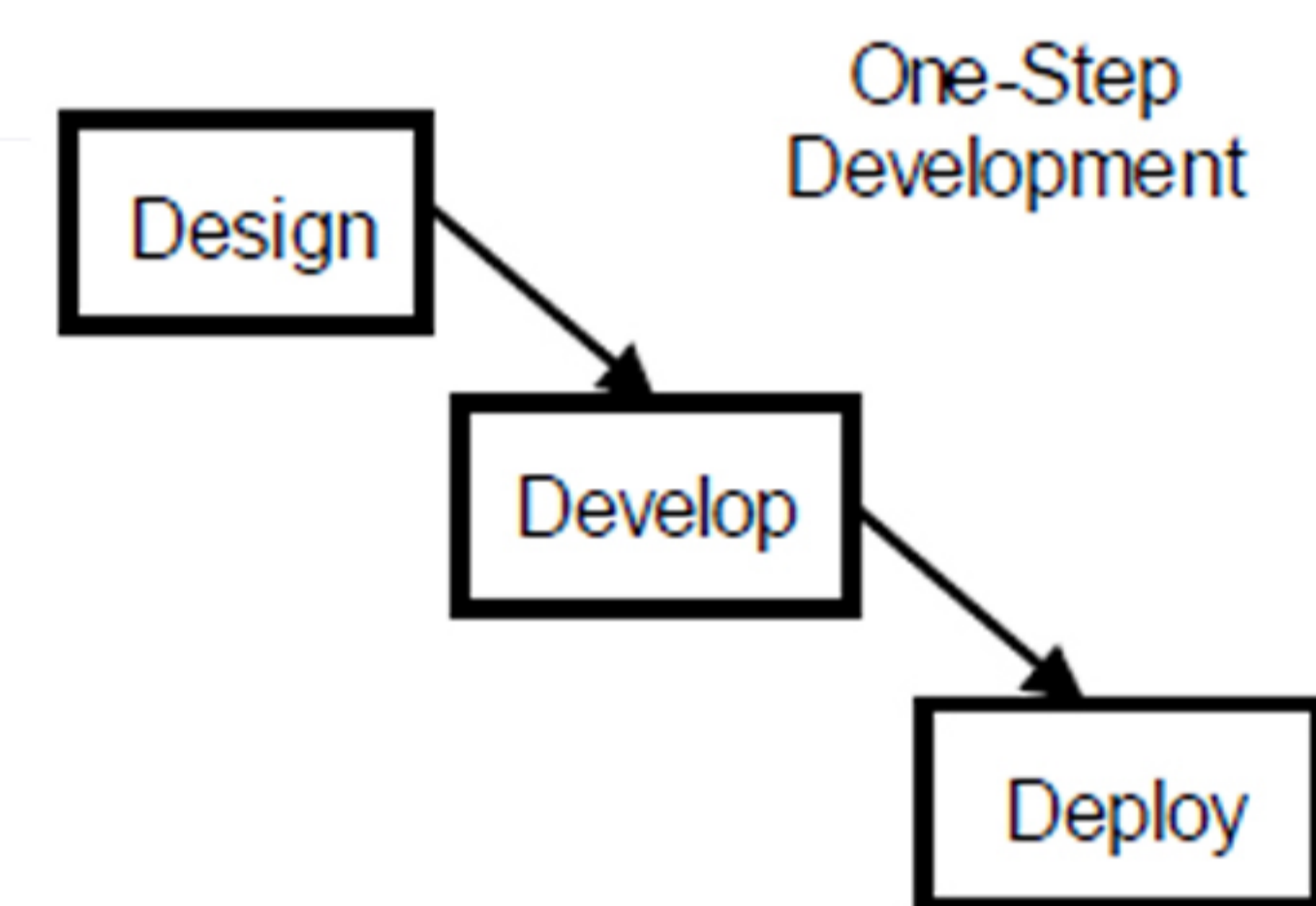


CRS pioneered software based navigational systems and developed a variety of software and hardware sub-units, modules as well as complete products to facilitate test, development, and validation as well as operation of advanced navigational systems. The products include hardware sub-units (downconverters, upconverters, ADC and DAC boards, Data Acquisition and Processing Boards, Data Acquisition, Storage and Replay Units, Antennas, etc.) needed to design, develop, test, and implement complete navigation receivers and associated products. A novel suite of software modules allows design, integration with hardware, test, and complete product development. A real time development platform incorporating both software and hardware suite is also available.

CRS developed and introduced complete dual frequency software based GPS/GNSS receivers during 2000. The receivers provides the most precise observations and are being widely used for precision ionospheric monitoring. A variety of other receivers with specialized applications are also available. These include: Ultra Tightly Coupled GPS Receivers with MEM IMU and with high dynamics, A/J capabilities and better than cm level accuracy. These receivers can also be integrated with complimentary observations (optical and/or radio data) to facilitate navigation in urban environments. Direct acquisition of C/A, P(Y), M code are performed in CRS's Block Processing Receivers.

Using similar approach, Pseudolites to compliment GPS or allow navigational in GPS denied environments are developed and available for commercial applications. Software based systems have also been used for detection and precision localization of interfering or jamming sources (Jammer Locator).



In order to meet the rapidly increasing demands on precision navigation under difficult and widely different situations, CRS developed the most accurate, capable and flexible navigation simulators that deliver the most accurate RF signals commensurate with satellite, environment and receiver platform conditions. A wide range of RF signal generators (simulators) are provided to meet the diverse needs. All the constellations (GPS, Glonass, Galileo, QZSS, COMPASS) are available and constant updates are provided as some of these systems are being modernized (GPS-III) or defined.