

Monitor Stations Track GPS satellites as they pass overhead Collect navigation signals, range/carrier measurements, and atmospheric data Feed observations to the master control station Utilize sophisticated GPS receivers Provide global coverage via 16 sites: 6 from the Air Force plus 10 from NGA ☐ Master Control Station ● Provides command and control of the GPS constellation ● Uses global monitor station data to compute the precise locations of the satellites ● Generates navigation messages for upload to the satellites ● Monitors satellite broadcasts and system integrity to ensure constellation health and accuracy ● Performs satellite maintenance and anomaly resolution, including repositioning satellites to maintain optimal constellation ● Currently uses separate systems (AEP ☐ & LADO ☐) to control operational and non-operational satellites ● Backed up by a fully operational alternate master control station Ground Antennas ● Send commands, navigation data uploads, and processor program loads to the satellites ● Collect telemetry ● Communicate via S-band and perform S-band ranging to provide anomaly resolution and early orbit support ● Consist of 4 dedicated GPS ground antennas plus 7 Air Force Satellite Control Network (AFSCN) remote tracking stations