DEVELOPING AND DEPLOYING NASA'S SPACE GEODESY SATELLITE LASER RANGING (SGSLR) SYSTEMS.

J. McGarry[1], S. Merkowitz[1], M. Shappirio[1], S. Butani[2], J. Cheek[3], C. Clarke[4], J. Degnan[3], H. Donovan[4], F. Hall[4], J. Horvath[4], D. Lamb[2], A. Mann[4], A. Nelson[4], T. Oldham[5], D. Patterson[4], R. Ricklefs[5], M. Torrence[6], T. Varghese[5], S. Wetzel[4], J. Woo[2], T. Zagwodzki[5]. [1]NASA Goddard Space Flight Center (code 690.2, Greenbelt, Maryland USA 20771, Jan.McGarry@nasa.gov), [2]Exelis Inc., [3]Sigma Space Corporation, [4]Honeywell Technology Solutions Incorporated, [5]Cybioms Corporation, [6]Stinger Ghaffarian Technologies.

NASA will be building up to ten new operational Satellite Laser Ranging systems in the coming decade to be co-located with VLBI2010 systems and GNSS receivers. The first two of these new SLR systems will be deployed to McDonald Observatory in Texas and Mount Haleakala in Hawaii. These Space Geodesy Satellite Laser Ranging (SGSLR) systems will be based upon the Next Generation Satellite Laser Ranging (NGSLR) design with modifications from the lessons learned during the NGSLR development, testing, and operations. An overview of the design changes will be presented, along with the expected performance of the deployment strategy for the first two systems, and the current plans for systems three and beyond.