

NGS Field Operations: Modernizing in Many Ways

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SUMMARY

A core capability of NGS is field operations to conduct surveying and positioning efforts to support the Coastal Mapping Program, Federal Aviation Administration, and various internal NOAA projects across the U.S. and its territories. In addition to these core missions, the NGS completes complex surveying projects and instrumentation support to drive progress for geodetic networks, government and education partners, and the overall international geodesy community. NGS collects data to answer critical questions, advance software developments, and test new field procedures supporting current users and efforts to modernize the National Spatial Reference System (NSRS). To support the overall geodetic community and development of the International Terrestrial Reference Frame. NGS maintains the NOAA CORS Network (NCN), requiring construction and maintenance of stations, and completes local tie surveys at co-location sites to provide millimeter-level vectors

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various space techniques (VLBI, DORIS, SLR, GNSS) to the IERS. Through the use of advanced surveying technology and GIS-based visualization tools, NGS field operations have greatly advanced in recent years, not only modernizing how work is completed, but keeping an eye on the future to ensure requirements for surveying in new datums can be applied on the ground.

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