

## Fernandina Beach Digital Orthophotography



The Fernandina Beach Digital Orthophotography project was tasked by the U.S. Army Corps of Engineers (COE), Jacksonville District for the Fernandina Beach shoreline protection project in Nassau County, FL. The purpose of this COE task was to provide digital color orthophotography of Fernandina Beach from monument R-10 to R-40 in compliance with Florida Department of Environmental Protection (FDEP), Beaches and Shores standards.

Pickett's flight department acquired photography under optimal conditions after studying tidal charts and weather forecasts. The resulting photography was immediately checked for quality and coverage and, utilizing our photogrammetric scanner, converted to digital image frames.

Photogrammetrists then ran the images through orientation and triangulation procedures utilizing Airborne GPS data, ground control and other data pertinent to the image capture and referencing process. Once satisfactory results were obtained, stereo pairs were viewed and a digital elevation model (DEM) was photogrammetrically created for the entire project site.

The images were orthorectified in a process that uses the DEM to remove terrain displacement within each frame. Alternating images were mosaicked together to create one orthorectified image of the entire site.

Fernandina Beach orthoimagery was delivered at a display scale of 1"=100' with a 0.5' ground pixel resolution.

