

# STATEMENT OF WORK

Contract No. DACW43-98-D-0512

SCOPE OF WORK

**FORT STEWART, GA**

**ORTHOGRAPHIC & DEM PRODUCTION**

**EARTHDATA INTERNATIONAL, INC.**

**DELIVERY ORDER NO.**

Orthophoto production of portions of Fort. Stewart, GA has been requested. The final products needed are color digital orthophotos and DEMs that will meet National Map Accuracy Standards (NAS) at a horizontal scale of 1:5000. Color aerial photography at a negative scale of 1:20000 and a calibration report will be provided by the government. Aerotriangulation (AT) solutions will be furnished by the government to produce a DEM that produces orthophotos at horizontal scale of 1:5000, which meets NAS. The project area is shown on maps previously furnished.

2. Information supplied by the government:

a. Required color aerial photography.

b. AT solution.

c. Approved image selected from samples provided by the contractor. (see changes to section 3.S)

3. Work to be performed by the Contractor: Contractor shall provide equipment, supplies, facilities, and personnel to accomplish the following work:

a. The color aerial film will be scanned directly from the roll for orthophoto preparation and control transferred for digital orthophoto rectification.

**Before transfer, diapositives will be checked for scratches, blemishes, or other abnormal markings. Unacceptable diapositives will be attached to a quality check form indicating the location and type of abnormality and will be returned to the photographic laboratory. Upon acceptable completion of diapositive check, control points will be transferred from the analytical diapositive to the orthophoto diapositive using a point transfer instrument or equivalent.**

b. The contractor will scan photography for digital orthophoto production with 0.5-m ground pixel resolution.

**Checked orthophoto diapositives will be scanned utilizing a QCAI scanner or equivalent. The scanner must be capable of scanning color data in one pass.**

**Digital imagery will be set up, oriented, and spatial resection and coordinate transformation will be performed.**

**Rectification of all required imagery will be performed and checked. Visual checks of the image quality will be performed. Radiometric variation will be checked with image histogram analysis including linear contrast stretch, user selected contrast stretch, histogram normalization, histogram clipping and radiometric variation between adjacent images will be minimized.**

**The Contractor will provide sample digital images in Erdas Imagine format for customer approval of histograms, contrast, etc. before the final product is produced. Subsequent images will be matched as closely as possible to customer-approved sample.**

c. Produce DEM for the production of Digital Orthophotos

d. Produce color digital orthophotos of the site at 1:5000 with a pixel resolution of 0.5-m. Orthophoto files will be in ERDAS Imagine (.img) format on CD-ROM. Orthophotos will be in UTM metric, Zone 17, NAD83/NAVD88 coordinates. Each ortho tile will be 3,000 m x 3,000 m.

e. Produce a digital photo index showing the locations of each digital image file in Arc/Info 7.1.2 vector polygon format. The file will contain fields that detail the image file name and identify the deliverable CD.

f. The Contractor will provide compressed orthophoto files utilizing the Mr. Sid compression software. The compressed files will be on CD-ROM. The Contractor will provide six sets of the compressed files on CD-ROM.

g. The Contractor will provide two sets of true color 9 x 9 in. prints from the 1:20000 negative scale photography used in the orthophoto project.

#### 4. Delivery items:

- a. Two sets of True Color digital orthophoto files in ERDAS Imagine on CD-ROM disks.
- b. DEM suitable **for orthorectification only** on CD-ROM.
- c. One copy of the digital Photo Index in Arc/Info 7.1.2 vector polygon format on CD-ROM.
- d. Six sets of compressed (MrSID Compression Software) orthophoto files on CD-ROM.
- e. Two sets of true color 9 x 9-in. prints.

#### 5. Schedule and submittal:

- a. The contractor will deliver all final products including CD ROM digital data files by:
- b. All material to be furnished by the contractor shall be delivered at the contractors expense to: U.S. ARMY CORPS OF ENGINEERS, ST. LOUIS DISTRICT, 1222 SPRUCE STREET, ST. LOUIS, MO., 63103-2833.

6. Time extensions: In the event, these schedules are exceeded due to causes beyond the control and without fault or negligence of the contractor, this delivery order will be modified in writing and the delivery order completion date will be extended one calendar day for each calendar day of delay.