Federal Aviation Administration

Airport Surveying-GIS Program

Survey and Quality Control Plan for AC 150/5300-18

Airport Name	State	Location Identifier

Submitting Organization Information	
Name:	
Address Line 1:	
Address Line2:	
City:	
State:	
Zip Code:	
Telephone Number:	
Fax Number:	
Contact Person Name:	
Contact Person Email Address:	

Estimated Start Date	Estimated Completion Date

1. Project Summary: This section should describe the *WHAT* and *WHY* of the project. It should list the information from the statement of work describing what data is to be collected. This section should also describe the why the data is being collected. Is the survey part of a larger project such as runway construction, runway safety area improvement etc. or is it specifically to collect and analyze objects for obstruction analysis?

2. Field Survey: This section defines the project by identifying how the contractor proposes to complete the field collection portion of the project. What method, tools and techniques they will use in the field to determine or verify the position of objects. This section should tell the story as how the contractor sees the project from start to finish in detail. What stations they expect to occupy to observe different features, what techniques they will use to make the observations etc.

3. Geodetic Control: Describe the plan for verifying connection of this survey to the National Spatial Reference System (NSRS) and how airport control will be used during the survey. This section continues the discussion of the project by detailing how the field teams will use the established permanent geodetic control or set temporary control stations to complete the project.

4. Imagery: This section describes the *HOW* the project will be completed. In this section the contractor should describe in detail how they will use the imagery collected for the project. It should describe what parts of the project will use the imagery for data collection or analysis. It should describe in detail how airport features, such as airport buildings, aircraft movement areas, landmark features, obstruction area limits and other planimetric information will be collected within the required horizontal and vertical accuracies.

5. Existing Data: This section continues the discussion of the project by detailing how it will be used to meet the requirements of the project. The contractor should provide information regarding the source, traceability and quality of the data.

6. Data Processing: This section completes the project how discussion of the data collection by providing information on the tools techniques and processes the contractor will use to post process, reduce, and collate the data to produce the final deliverable required.

7. Equipment Listing: Provide a complete listing of the equipment to be used in the survey, including model and serial numbers, calibration reports, and equipment maintenance reports. This will include field survey and remote sensing hardware and software.

8. Quality Assurance – In this section describe HOW the contractor proposes to ensure the collection and delivery of quality data meeting the requirements. At a minimum, discuss the following for each of the items in each of the following sections …
    i. Describe the quality control measures that will be in place to ensure that all data will be checked, complete, and reliable and meet the accuracy requirements in these General Specifications (including error analysis).
    ii. Describe and provide samples of the evidence that will demonstrate how methods used to collect the various types of features met the desired accuracies.
    iii. Describe the data back up and archive procedures and methods to be used to ensure that the original data will not be modified.
    iv. Describe and explain the method that will be used to check all file formats and a summary of the file-naming convention for all electronic files.

    b. Field Operations: This section should detail what tools, techniques and processes the field team will use to ensure the collection of quality data. It should describe how the field data will be validated to ensure al l the required information was determined including any required attribution. It should discuss how and when will be transferred to office personnel for reduction and analysis.
    c. Remote Sensing: This section should describe how the combination of remote sensing and ground surveying techniques will be used to accomplish the survey and how the results will be compared. It should also describe how potential discrepancies between the remote sensing and ground survey will be resolved.
    d. Office Operations: This section should describe the quality assurance of the field and office operations as they are combined to produce the final dataset.

9. Data Format: The final required section should describe how the field and office data are combined into a final data set for delivery. It should discuss what software will be used to develop the data set and how the data, features and feature attribution will be compiled.

10. Other information (Optional): In this section of the plan discuss any information the contractor feels is relevant to the project that is not described elsewhere in the plan. One potential use of this section is to describe potential challenges for the data collection efforts and how the contractor proposes to reduce or mitigate these challenges.