

NOAA COASTAL MAPPING PROGRAM PROJECT COMPLETION REPORT

PROJECT AK0309

PATTON BAY, MONTAGUE ISLAND PRINCE WILLIAM SOUND, ALASKA

Introduction

Coastal Mapping Program (CMP) Project AK0309 provides coastal zone mapping data of Patton Bay located on the southern portion of Montague Island in Prince William Sound, Alaska. Specific features compiled are Box Point, Wooded Islands, and Jeanie Point. The digital cartographic feature file may be used in support of the NOAA Nautical Charting Program (NCP) and coastal zone management activities.

Project Design

This project was designed per a request from the NOAA Hydrographic Surveys Division (HSD) for cartographic data in support of HSD operations. Based on an analysis of project requirements and results of a source data search, it was determined that CMP procedures for multiple source projects would apply for this project. Available source data deemed adequate for successful completion of this project included sources acquired in April 2000.

Field Operations

Routine CMP field operations did not apply for this project based on the origin of the project source data.

Aerotriangulation

The aerotriangulation task was accomplished by a member of Systems and Quality Assurance Branch of the Remote Sensing Division (RSD) in February 2004. The image files were imported into SOCET SET, version 4.4.1, using the DataThruWay, version 4.4.1 software. The importing process also converted the stored compressed files to a recognized native SOCET SET format (NITF 2.0) and included supporting data extension files consisting of previously measured sensor model parameters. The analytical aerotriangulation procedures were completed from a Digital Photogrammetric Workstation using the Multi-Sensor Triangulation (MST) Tool of SOCET SET. The interactive point measurement tool of MST was used to collect several tie points and it was determined from running the simultaneous solve adjustment program that the average predicted horizontal circular error for all well defined points in this project area is 12 meters at the 95% confidence level.

Compilation

Digital feature data compilation for this project was accomplished by a member of the Systems and Quality Assurance Branch of RSD in February 2004. The Feature Extraction Tool of SOCET SET was used during the digital cartographic feature data compilation phase of project completion. Feature attributes were established from the C-COAST specification file, which provides for the definition and attribution scheme for the suite of cartographic features pertinent to the CMP. Cartographic features were compiled to meet a horizontal accuracy of 15 meters at the 95% confidence level.

Final Review

Final office review operations were conducted interactively by a member of the Applications Branch of RSD in March 2004, and independently upon initial completion of feature extraction. The process included review of the aerotriangulation results, review of the identification and attribution of cartographic features based on image analysis and criteria defined in C-COAST, and review of client specific support products; such as the Chart Maintenance Print generated for NCP application. The entire suite of project products was evaluated for compliance to CMP requirements. The last step in the quality control process was the evaluation of the DCFF contents focusing on the integrity of topology once the DCFF was converted into shapefile format.

NOAA nautical chart 16701, Prince William Sound Western Entrance, 1:81,436 scale, July 2003, 19th edition, was used for the chart comparison and for the Chart Maintenance Print.

Project Products

The following specifies the location and identification of the products generated during the completion of this project:

RSD Applications Branch Archive

- Textual (hard) copy of the Project Completion Report (PCR)
- Page size graphic plot of GC10559 file contents, attached to PCR

Remote Sensing Division Electronic Data Library

- Project Data Base
- Digital copy of DCFF GC10559 in ESRI shapefile format
- Digital copy of the PCR in Adobe Acrobat PDF format

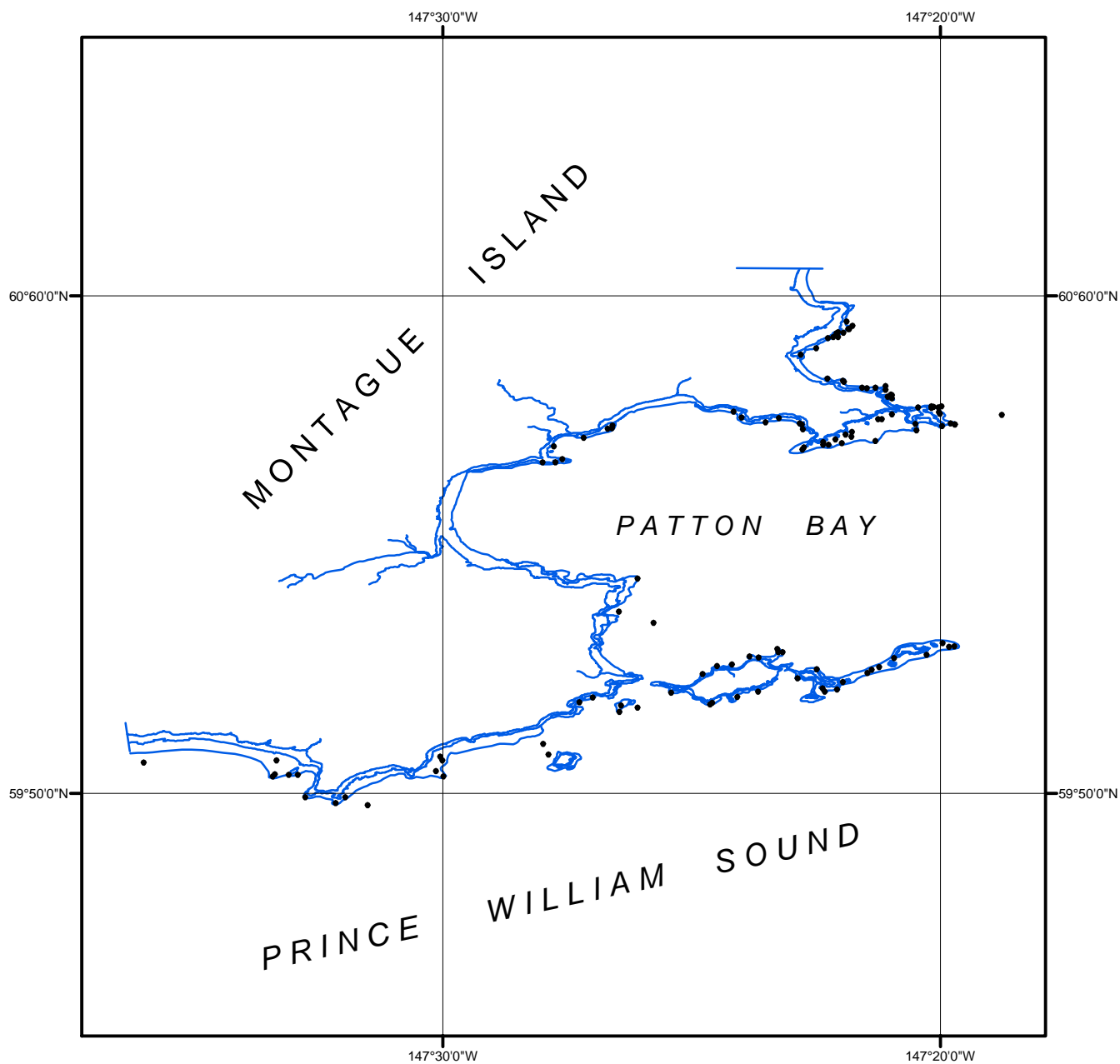
NOAA Shoreline Data Explorer

- DCFF for GC10559
- Metadata file for GC10559
- Digital copy of the PCR in Adobe Acrobat PDF format

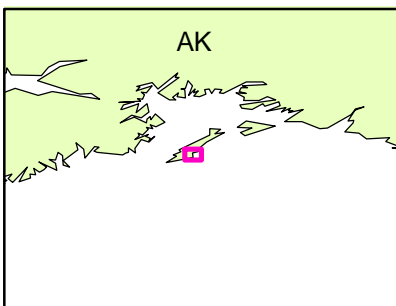
End of Report

PATTON BAY, MONTAGUE ISLAND

PRINCE WILLIAM SOUND, ALASKA



Overview



AK0309

GC10559