

NGS–OPSD Integration Program

Procedure Number: SOP # 7.3.A.4.10

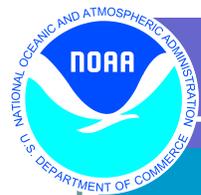
Created On: September 09, 2009

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Approved On: April 5, 2011

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1. **Title** NGS–OPSD Integration Program
2. **Purpose** To state what the NGS–OPSD Integration Program is, what is required to access it, and how to use it. This program has mostly been used over the past 10 plus years for matching data between the two offices of CO-OPS and NGS, since both offices' data bases contain identical information differing only in style, wording, and more or less detail. The program attempts to identify accurately if the mark described in one office's data base is the same mark in the other office's data base. If not, the program provides status codes as described below.
3. **Background/History** The NGS–OPSD Integration Program has been in use since 1997 by the National Geodetic Survey (NGS) and the Oceanographic Products and Services Division (OPSD) (the predecessor organization of Center for Operational Oceanographic Products and Services (CO-OPS)) as a means of matching identical information to one another's data bases. The program is capable of matching identical bench marks which reside in both independent data bases. The two independent data bases are the "NGS Integrated Data Base" and the CO-OPS DPASMAN Data Base. Each bench mark that resides in either data base has a unique identifier. This program is used to equate the unique identifiers for the same bench mark that resides in both data bases. The unique identifier in the CO-OPS DPASMAN Data Base is a vertical mark (VM) number. The unique identifier in the NGS Integrated Data Base is called a permanent identifier (PID).
4. **Scope/Applicability** CO-OPS' data base (DPAS) maintains information about bench mark history including stamping, designation, latitude/longitude, and descriptions. NGS also maintains its own independent data base referencing bench mark stampings, designations, and descriptions. However, in each office's data base, while the data populated are similar, they are often written in different style and with different wording about the same bench mark. The task of determining whether you are looking at the same bench mark referenced in each office's data base has already been done for you by the NGS-OPSD Integration Program. As new marks are being added in CO-OPS' data



base to historical stations as well as to new stations, the program needs to be run frequently to match these new marks to NGS. Thus the NGS – OPSD Integration Program serves as a useful program not only in matching bench marks, but also in checking the status of new, unmatched, and matched bench marks in both data bases.

5. Main Processes

Information Systems Division (ISD) has made available the NGS-OPSD Integration Program on all users computer desktop, and authorized persons can access the program. Authorized users need to have user names and passwords access to both databases (NGS and CO-OPS).

When the program is accessed, the program’s login window pops up with a greeting that says “Welcome to the NGS – OPSD Integration Program.” There are two sides, an NGS side and a CO-OPS side. Both sides need user log-in name and password so that essentially you will be logging in 2 user names and 2 passwords. Once the user has logged in, he arrives into the program where he sees an NGS-OPSD Integration Menu screen. Refer to the next subsection where this continues.

6. Detailed Sub-Processes/Checklists

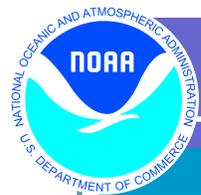
6.1 Mouse-click on the program icon on your desktop and login both your NGS and CO-OPS login IDs and passwords to enter into the program.

6.2 First thing you will see is a screen showing the NGS-OPSD Integration Menu Bar. You will choose from 5 available menus (File, NGS/OPSD, Other, Window, and Help). To start the program to retrieve the data from both NGS and OPSD data bases, choose the NGS/OPSD menu which has a drop-down list displaying 5 items to choose from as follows: (1) Points by Station, (2) Points by VMs, (3) Points with Discrepancies, (4) Points Matched, and (5) Auto Match.

6.3 Choosing either “Points by Station” or Points by VMs” will start the program to retrieve the data from both NGS and OPSD data bases displaying them side by side.

6.4 After choosing “Points by VMs”, immediately you notice the system retrieving the data, and next you will observe that the NGS side is blank but the OPSD window side is populated with a default station showing its Station ID, VM No., Stamping, Designation, coordinates, and PID #, if any. At the bottom of that window, you will find the “Radius Retrieve”, Find, Find Next, Match, and No Match, selections, any of which may be selected in working the program.

7. Another important item that you will notice on the OPSD window side is the “Status” box which contains a single number from 0 thru 5. Each of those numbers represents something in the matching process as defined below:



‘0’ means a new bench mark has been added in DPAS but no matching process has been done.

‘1’ means there is an error in the Vertical Mark position; the Vertical Mark ACRN matches an NGS position but the stampings do not match perfectly.

‘2’ means this is a matched NGS and CO-OPS mark; generally when a mark in DPAS has an NGS PID, you will have a match.

‘3’ means a CO-OPS Vertical Mark contains an ACRN that doesn’t match any of NGS’s PIDs.

‘4’ means that no match exists between NGS and CO-OPS mark.

‘5’ means that there is an error in either the latitude or longitude of the Vertical Mark position.

8. To begin the matching process, you will click on “Find” at bottom of OPSD window which immediately brings up a pop-up window allowing you to key in your search string, bench mark station, and for you to highlight the circle for Station OPSD. When done, click on Go. You arrive at a window showing the bench mark information of your station. When you click on “Find Next” at bottom of window, it advances to the next mark, and so on.
9. Finally, click anywhere inside your OPSD window and it should immediately activate the NGS window side. With both NGS and OPSD windows opened side by side, your search through NGS side for a match. If you have an NGS PID populated on your OPSD side, you should immediately get a match. If the status is set to 0, you should go to the bottom of OPSD window and choose “Match”, to match the mark and activate to a status of 2. If there is no PID on the OPSD side, and you do not find a match on NGS side, you simply click on “No Match” which will activate another pop-up window asking you to verify whether you want to set the vertical mark to a status of 4.
10. **Quality Assurance/Control** Two user names and two passwords prevent irresponsible access. CO-OPS and NGS has designated each person for performing the matching and for verifying the matching process.
11. **Management/Responsibility** The responsibility for maintaining and updating this SOP as necessary, in the future shall reside jointly with the National Geodetic Survey (NGS) and the Center for Operational Oceanographic Products and Services (CO-OPS). Points of contact (POC) at NGS are Gordan Adams, Chief, Systems Development and Neil Weston, Chief Spatial Reference System Division. Points of contact (POC) at CO-OPS are Thomas Landon, Division Deputy Chief and Manoj Samant, Division Branch Chief.