



There is a distinction between certification and registration. NSPS/THSOA certification is official recognition by one's colleagues and peers that an individual has demonstrated professional integrity and competence in his or her field. As such, the NSPS/THSOA voluntary hydrographer certification program is considered a specialty certification. It is not a substitute for registration as, for example, a Land Surveyor or Professional Engineer. Registration is a legal act on the part of states to protect the public health, safety and welfare of its people. It is a procedure (required by various state and local governments) that requires the licensing of certain professions, practices, trades, etc. under formal statutes and ordinances. Registration may be required by the local state, county, etc., whether or not one secures certification.

Certification as a Hydrographer is official recognition by NSPS/THSOA that a person has demonstrated to the satisfaction of the NSPS/THSOA Hydrographer Certification Board that he or she is minimally competent to conduct hydrographic surveys.

ELIGIBILITY

The NSPS/THSOA Hydrographer Certification Program is open to all persons. To become certified, an applicant need not be a member of NSPS or THSOA.

REQUIREMENTS FOR CERTIFICATION

An applicant must demonstrate to the satisfaction of the Certification Board that he or she has the necessary knowledge to perform hydrographic surveys and the ability to apply that knowledge. An applicant must do this by meeting an experience requirement, providing documentation of that experience with details of each hydrographic engagement which demonstrate the applicants understanding of hydrographic surveying, and by passing an examination. If the experience and education documentation clearly demonstrates to the Certification Board the requisite knowledge, ability, and experience, the Certification Board may waive the examination requirement, and may require an interview with one or more Board members.

EXPERIENCE

To qualify to take the examination, an applicant must have sixty (60) months experience in hydrography, of which twenty four (24) months are in responsible technical charge and twenty four (24) months have been in the field. The twenty four (24) months in responsible technical charge and the twenty four (24) months in the field may be counted for the same time period if appropriate. Recency of experience may be considered by the Board in evaluating the application.

If the applicant presents a certificate of completion, an International Hydrographic Organization (IHO) recognized Category A program of instruction will be counted as thirty six (36) months of the sixty (60) months Hydrographic experience. If the applicant presents a certificate of completion, an International Hydrographic Organization (IHO) recognized Category B program of instruction will be counted as twenty four (24) months of the sixty (60) months Hydrographic experience. The twenty four (24) months in the field and twenty four (24) months in technical charge will not be waived in any case.

The Certification Board may consider waiving the examination requirement if the applicant's description of hydrographic engagements demonstrates exceptional hydrographic knowledge and experience with more than

half in responsible technical charge. These hydrographic engagements should comprise a broad range of multifaceted hydrographic projects with responsible technical charge of complete projects. Mere presentation of time will not be sufficient for consideration. **Waiver of the Examination is strictly a Board determination based upon information presented in the application, and may not be requested by the applicant.**

Hydrographic experience is to be fully detailed in the Experience Record portion of the Application. These details are the applicant's opportunity to demonstrate to the Certification Board that he or she has the necessary knowledge to perform hydrographic surveys and the ability to apply that knowledge.

KNOWLEDGE

To screen applicants for a minimum level of understanding of hydrographic surveying, The Certification Board will review the detailed descriptions of the applicant's hydrographic engagements, and may contact the applicant's references for additional information. The Certification Board may also require an interview of the applicant by one or more Certification Board members.

APPLICATION

Applicants must use the application form supplied. A \$50.00 application fee must be sent with application.

A minimum of four (4) references, preferably from your supervisors, or from someone else familiar with your technical hydrographic work experience, are required. References must be received by NSPS within ninety (90) days from receipt of your application. If references are not received within ninety (90) days from receipt application, the application for certification will be denied without refund. The applicant will be required to wait a period of twelve (12) months from the submission date of the denied application before reapplying.

The Experience Record form is a Microsoft® Word© document that may be filled out on your computer. The Experience Record is where the applicant demonstrates to the satisfaction of the Certification Board that he or she has the necessary knowledge to perform hydrographic surveys and the ability to apply that knowledge.

The Record is in two parts. The first is a tabulation of all experience engagements since high school or age 18 whichever is later with a break down of experience by number of months. This section is used by the Certification Board to judge the time in hydrography requirements. The second part is a detailed description of each hydrographic engagement. This section is used by the Certification Board to judge the experience and knowledge of hydrography requirements.

The Certification Board will determine whether the application meets minimum standards for taking the certification examination, or for waiving the examination. The applicant may be required to submit additional evidence in support of the application. Such evidence would typically include, but is not restricted to, personal statements, copies of survey reports, letters of reference, affidavits, academic transcripts, and copies of professional licenses. Requested information must be received within 30 days (from date on letter) or certification will be denied. Additional information will only be requested one time before final evaluation of the application.

In the event the application does not meet the minimum requirements for certification, the Board can:

- a. Request additional specific information from the applicant, which, if properly supplied, will allow the application to meet minimum standards.
- b. Judge the applicant unqualified.

An applicant who has been denied certification may reapply after twelve (12) months from the submission date of the denied application. A person may reapply any number of times.

EXAMINATION

The applicant must pass an examination, which is prepared by the Hydrographer Certification Board. The examination is 160 multiple choice questions to be completed in one three (3) hour proctored session. The examination will be formed by random selection from a bank of questions and will test knowledge in the six categories of the IHO Standards of Competence for Hydrographers. The number of questions from each category is as follows:

Hydrographer Certification Exam Question Categories:

Hydrographic Specifications - 20 (12.5%)

- USACE/NOAA.
- Other Administrative questions.

Nautical Science - 20 (12.5%)

- Rules of the Road, Safety, Communication, Work life afloat, etc.

Positioning - 24 (15%)

- Horizontal Control, GPS, Acoustic Positioning, Tag Line, Auto Tracking Theodolite, Trilateration, Lines-of-Position, Inertial, etc.

Bathymetry - 56 (35%)

- Soundings, wrecks, rocks, obstructions, dangers to navigation, etc.
- Singlebeam, Multibeam, etc.

Tides/Water Levels - 20 (12.5%)

- Tides/Water Levels, station installation, datum computations, water level correctors for soundings, zoning for correctors, etc.
- Vertical Control
- GPS derived water levels

Seafloor Imagery - 20 (12.5%)

- Side Scan Sonar, Acoustic Backscatter
- Seafloor, structures, water column, sub-bottom, etc.

Upon approval of an application, the applicant will receive detailed examination instructions, and notice of predetermined examination dates and sites. Examinations are offered at various times and sites throughout the year, but are not limited to those advertised. The Certification Board will consider requests for alternative examination sites and dates to accommodate the applicant.

Photographic identification must be shown at the time the exam is taken (Passports, current driver's license, government/military I.D., or current student I.D. card.) Certification examinations will be open book format exams. A list of suggested references is provided with the program description. The suggested references and other reference materials can be brought into the testing facility. Scientific calculators are useful for taking the exam. Cell phones, computers, scanners, cameras, recording devices, and similar items are prohibited in the examination room.

Programmable and non-programmable calculators are permitted during exam testing if they are: silent, without external power or without communication links such as Bluetooth, infrared and wireless technology. In addition, allowed calculators shall not have external memory cards, modules, USB flash drives or ports for such

devices. The use of any device having a QWERTY keyboard / keypad during the exam is strictly prohibited. The following devices are also prohibited, whether or not they have a QWERTY keyboard / keypad function: Palmtop, Laptop, Tablet, Handheld or Desktop computers, Personal readers, Data Banks, Data Collectors, and Personal Data Assistants (PDA). Also, cell phones, cameras, scanners, video recorders or any other copying devices are prohibited. Calculators with other style alphanumeric keyboard / keypads are acceptable. Notwithstanding the above, the Board or its designees have the right to prohibit the use of any device which, in the opinion of the Board, poses a threat to exam security. The HP41 and HP48 are not allowed because they contain a communication link (infrared port) and an external memory card port which does not meet the requirements for use on Hydrographer Certification Exam as established by Board.

CERTIFICATION

Upon completion of all requirements an applicant will be certified, and a certificate will be issued by the Certification Board.

FEES

A \$50.00 application fee must be submitted with application.

A \$150.00 examination/certification fee must be submitted before a scheduled examination. This \$150.00 fee includes certification if the examination is passed. If the Hydrographer Certification Board approves a waiver of the examination, the \$150.00 fee must be submitted to receive certification.

The initial certification status as “active” is valid for 3 years, after which the Hydrographer Certification Board has instituted a \$30 per three-year fee in order to maintain “active” status. Near the end of the 3-year period, you will receive an invoice.

APPEAL

If the Certification Board has denied an applicant approval to sit for the Examination or has denied certification, that applicant may appeal to the Chairperson of the Certification Board by notifying the NSPS liaison in writing within (30) days from the date on the denial notification. The appeal must include the reasons for the appeal based on the application requirements. If the Chairperson believes that an error may have been made during the certification process, the Chairperson can direct the Certification Board to reconsider the application.

Applicants may appeal the Certification Board Chairperson’s decision by notifying the NSPS liaison in writing within (30) days from the date on the decision letter. The appeal must include the reasons for the appeal based on the application requirements. This second appeal will be forwarded to the President of NSPS for consideration and final resolution.

DISABILITY ASSISTANCE

If you have a disability and require accommodation in order to fully participate in the certification program, please contact the NSPS Hydrographer Certification Board liaison at 240-439-4615 to discuss your specific needs.

Applicant # _____
(Do not mark in this area)



NSPS/THSOA HYDROGRAPHER CERTIFICATION APPLICATION



In making this application, I fully understand that it is a voluntary request to the National Society of Professional Surveyors to review my background and experience for qualification to sit for the NSPS/THSOA Hydrographer Certification Examination and for Hydrographer Certification. I authorize the Congress to make inquiries concerning my character and qualification by contacting the references I have presented for this application.

Further, I subscribe to the highest standards of professional conduct with knowledge that any false statement or misrepresentation in this application may result in denial of approval to sit for the NSPS/THSOA Hydrographer Certification Examination and for Hydrographer Certification.

As a Certified Hydrographer, I will dedicate my professional knowledge and skills to the advancement and betterment of human welfare:

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of humankind and the highest standards of professional conduct;

To place service before profit, honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In consideration of NSPS/THSOA's acceptance and processing of this application, I agree to waive any and all claims of liability or responsibility against NSPS/THSOA and to indemnify and hold harmless NSPS/THSOA, their directors, officers, board members, employees, agents, and representatives against any and all such injury, damages, or claims made by or on behalf of any person, partnership, association, or corporation. I further acknowledge that NSPS/THSOA, their directors, officers, board members, employees, agents or representatives are not liable to me, or to any other person, partnership, association, or corporation, in any way for any injury, damages or claims alleged to be based upon or arising out of the approval or disapproval of this application, or the approval or disapproval of Hydrographer Certification.

Acceptance to sit for the Hydrographer Certification Examination does not automatically mean that I will be certified upon completion of the examination, rather it will provide me the opportunity to demonstrate my qualifications for certification.

FEE: An application fee of \$50.00 (U.S.) must accompany this application. The application fee is nonrefundable. The exam fee will be \$150.00

Payment Options:

Make check or money order payable to NSPS.

Check Money Order Visa MasterCard American Express Discover

Name on Card _____

Credit Card Number _____ / _____ / _____ / _____

Expiration Date _____ / _____ CVVC Code _____

Signature _____

Email Address _____

Mail application and fee to:

NSPS/THSOA Hydrographer Certification, 5119 Pegasus Court, Suite Q, Frederick, MD 21704

1. Mr. Ms. _____
(Last name) (First name) (Middle)

2. Home Address _____

Phone: _____ Fax: _____

3. Work Address _____

Phone: _____ Fax: _____

4. Email Address _____

5. Where do you prefer to receive correspondences? _____ Home _____ Work

6. Citizen of: _____

7. List your professional registrations and licenses, dates issued and the issuing authority.

8. List your education.

School and Location _____

Dates of Attendance _____

Degree Earned _____

Date Awarded/ _____

Expected _____

Major Field of Specialization _____

I certify that I have, to the best of my ability, given true and accurate information in this application. I further certify that I have read the attached description of the Hydrographer Certification Program, and understand that I am applying for certification as an individual under its provisions.

Signature of applicant / Date

_____ / _____

Applicant # _____ (Do not mark in this space) Applicants Name _____



NSPS NSPS/THSOA HYDROGRAPHER CERTIFICATION REFERENCE FORM



CONFIDENTIAL TO THE NSPS/THSOA HYDROGRAPHER CERTIFICATION BOARD

TO MY SELECTED REFERENCE, _____, in consideration for an evaluation by you concerning my technical abilities, performance, character and reputation, made on this form to the American Congress on Surveying and Mapping / THSOA Hydrographer Certification Board, I hereby waive any right that I might have to pursue any cause or of action against you for comments that you might make in your recommendation and evaluation of me in conjunction with my application for certification as a Hydrographer.

Signature of applicant Date _____

INSTRUCTIONS TO THE APPLICANT:

A minimum of (4) references, preferably from your most recent hydrographic supervisors or someone else familiar with your technical hydrographic work experience, is required. You are to furnish a reference form to at least (4) persons listed on the Experience Record of your application. It is your responsibility to provide them with a copy of your Experience Record. It is your responsibility to see that the reference forms are completed by the persons to whom they are delivered and that those persons return the reference forms directly to the NSPS / THSOA Hydrographer Certification Board. If references are not received within (90) days, the application for certification will be denied. This form may be duplicated as necessary.

INSTRUCTIONS TO THE PERSON GIVING THIS REFERENCE:

The applicant listed above has made application for certification as Hydrographer. The Board requests that you answer the questions on this form, and the Board will, to the extent allowed by law, treat your answers in strictest confidence. You are urged to furnish full and complete facts for or against the applicant so the Board may evaluate the applicant's qualifications and experience.

PLEASE MAIL THIS REFERENCE FORM WHEN COMPLETED TO:

The Hydrographer Certification Board
National Society of Professional Surveyors
5119 Pegasus Court, Suite Q
Frederick, MD 21704

Applicant # _____ (do not mark in this space)

1. Your name _____

Your firm name _____

Your title _____

2. Your address _____

3. How long have you known the applicant? Year (s) from/to _____

4. Are you related to the applicant by blood or marriage? Yes _____ No _____

If so, how? _____

5. What was or is your business relationship with the applicant? _____

6. Have you and the applicant worked together in hydrographic surveying? Yes _____ No _____

If so, during what years? _____

7. Has the applicant been under your supervision? _____

During what years? _____

8. Has the applicant furnished you a copy of their Experience Record? _____

(Do not complete this form until you have a copy of the Experience Record.)

9. To the best of your knowledge, is the Experience Record complete and accurate? If not, explain.

10. Rate the applicants technical ability: (Circle one)

Poor Below Average Average Above Average Excellent

11. Do you know of anything that would affect the applicant's suitability for certification? Yes _____ No _____

If yes, explain.

Applicant # _____ (do not mark in this space)

12. Based on your evaluation, would you hire the applicant in a position of responsible technical charge of hydrographic surveying? _____ if not, explain.

13. Do you personally recommend the applicant for certification? _____ If not, explain.

I have read the foregoing document and have answered all questions fully and frankly. The answers are complete and are true of my own knowledge.

Signature of person giving reference (sign in ink) Date _____

Applicant # _____ (do not mark in this space)



NSPS/THSOA HYDROGRAPHER CERTIFICATION APPLICATION
EXPERIENCE RECORD



(Read Instructions carefully before completing this section)

List each of your experience engagements in the following table. Include your title and the name of your employer. List and number your engagements in chronological order, earliest engagement as number 1. List all relevant experience. Divide your hydrographic engagements as necessary to show significantly different activities. List each hydrographic training program as a separate engagement. Enter the number of months under each category of work for each engagement. Allocate months in work categories to reflect actual months conducting hydrography if duties and responsibilities are distributed among hydrographic and non-hydrographic tasks (engineering, land surveying, etc.). The first three columns should include all months spent in the engagement. **Hydrography (in technical charge) may include field work and office planning, data processing, analysis, and reporting. Hydrography (in field) may include Hydrography (in technical charge). The two do not sum to Hydrography (total) which may also include time assisting in the planning, processing, analysis and reporting of hydrographic surveys.** After the last engagement sum all time columns to reflect the total months of experience for each work category.

Following the tabulation of engagements **fully describe** each engagement involving hydrography. Label each description with its corresponding engagement number from the tabulated list. Keep the descriptions in chronologic order starting with the earliest hydrographic engagement. Do not describe positions not including hydrography. State the percentage of time your work involved hydrography. Fully describe your hydrographic activities and responsibilities, including but not limited to planning, budgeting, staffing, equipment selection, calibration, positioning, sounding, safety, field operations, data processing, data analysis, quality assurance, and reporting.

Engagement Number	Dates From – To mm/yy –mm/yy e.g. 09/98 -12/02 Months e.g. 51 months	Position Title and Organization	Months, Non-Surveying Non-Engineering Not Hydrography	Months Surveying/Engineering Not Hydrography	Months Hydrography (total)	Months Hydrography (in technical charge)	Months Hydrography (in field)
1							
2							
3							
4							

Engagement Number	Dates From – To mm/yy –mm/yy e.g. 09/98 -12/02 Months e.g. 51 months	Position Title and Organization	Months, Non-Surveying Non-Engineering Not Hydrography	Months Surveying/Engineering Not Hydrography	Months Hydrography (total)	Months Hydrography (in technical charge)	Months Hydrography (in field)
5							
6							
7							
8							
Total Months Experience							

Description of Positions Involving Hydrography Applicant #_____ (do not mark in this space)

Engagement #___ Position Title:
 Firm:
 Person most familiar with your performance:
 Address:
 Telephone:
 Percentage of time your work involved hydrography:
 Detailed description of your work in the position:

Engagement #___ Position Title:
 Firm:
 Person most familiar with your performance:
 Address:
 Telephone:
 Percentage of time your work involved hydrography:
 Detailed description of your work in the position:

Engagement #___ Position Title:
 Firm:
 Person most familiar with your performance:
 Address:

Telephone:
Percentage of time your work involved hydrography:
Detailed description of your work in the position:

Engagement #___ Position Title:
Firm:
Person most familiar with your performance:
Address:
Telephone:
Percentage of time your work involved hydrography:
Detailed description of your work in the position:

Engagement #___ Position Title:
Firm:
Person most familiar with your performance:
Address:
Telephone:
Percentage of time your work involved hydrography:
Detailed description of your work in the position:

Engagement #___ Position Title:
Firm:
Person most familiar with your performance:
Address:
Telephone:
Percentage of time your work involved hydrography:
Detailed description of your work in the position:

SUGGESTED REFERENCES

The following are links to a few references that are useful for all hydrographers, and may be useful in preparation for taking the Hydrographer Certification examination. Hard copies may be consulted during the open-book exam.

1. "Hydrographic Surveying," US Army Corps of Engineers Engineering Manual (EM) 1110-2-1003--download from: <http://140.194.76.129/publications/eng-manuals>
2. "Specifications and Deliverables," Office of Coast Survey, National Ocean Service, NOAA, --download from: <http://www.nauticalcharts.noaa.gov/hsd/specs/specs.htm>
3. "IHO Standards for Hydrographic Surveys," (S-44), --download from: http://www.iho.int/iho_pubs/standard/S-44_5E.pdf
4. "IHO Manual on Hydrography" (C-13)(Jan 13, 2010,--download from: http://www.iho.int/iho_pubs/CB/C13_Index.htm
5. "Tidal Datums and Their Applications," Center for Operational Oceanographic Products and Services, National Ocean Service, NOAA, --download from: http://tidesandcurrents.noaa.gov/publications/tidal_datums_and_their_applications.pdf
6. "Computational Techniques For Tidal Datums Handbook," Center for Operational Oceanographic Products and Services, National Ocean Service, NOAA, --download from: http://tidesandcurrents.noaa.gov/publications/Computational_Techniques_for_Tidal_Datums_handbook.pdf
7. "NAVIGATION RULES (International-Inland) COMDTINST M16672.2D,U.S.Department of Homeland Security, U.S. Coast Guard, --download from: <http://www.navcen.uscg.gov/?pageName=navRuleChanges> and click Download
8. "American Practical Navigator," Nathaniel Bowditch, National Geospatial-Intelligence Agency, --download from: <http://msi.nga.mil/NGAPortal/MSI.portal> and on the left side under "Find" select the "Publications" link, then from the drop down menu select " American Practical Navigator". This book is available as a single PDF file (35MB) or as individual PDF Chapters.
9. "NAVSTAR Global Positioning System Surveying," US Army Corps of Engineers Engineering Manual (EM) 1110-1-1003--download from: <http://140.194.76.129/publications/eng-manuals>
10. "Field Procedures Manual," Office of Coast Survey, NOAA, April 2009 <http://www.nauticalcharts.noaa.gov/hsd/fpm/fpm.htm>
11. "Seabeam Multibeam Sonar Theory of Operations Manual," at <http://www.mbari.org/data/mbsystem/sonarfunction/SeaBeamMultibeamTheoryOperation.pdf>

The following additional references provide background information and should be considered for inclusion in a hydrographer's technical library:

12. "Understanding Tides" NOAA NOS CO-OPS <http://tidesandcurrents.noaa.gov/pub.html>
13. "Our Restless Tides" NOAA NOS CO-OPS <http://tidesandcurrents.noaa.gov/pub.html>
14. "IHO Transfer Standard for Digital Hydrographic Data" (S-57), http://www.iho.int/iho_pubs/standard/S-57Ed3.1/31Main.pdf
15. "Federal Radio Navigation Plan," DOD/DOT. Download from: http://www.navcen.uscg.gov/pdf/2010_FRP_FINAL_Signed.pdf
16. "Hydrography for the Surveyor & Engineer," A.E. Ingham, ISBN# 0632029439, Blackwell Science, 238 Main Street, Cambridge, MA 02142, Phone 617-876-7000
17. "Chapman Piloting: Seamanship and Small Boat Handling," 62nd Edition, Edward S. Maloney, Morrow, William & Co., available from <http://amazon.com>.
18. "Dutton's Navigation and Piloting," published by US Naval Institute, by Benjamin Dutton, ISBN 0870211579, available from <http://amazon.com>.
19. "Surveying: Theory & Practice," Anderson & Mikhail, Dec 97, McGraw Hill Book Co. Available at <http://www.books.mcgraw-hill.com>
20. "Surveying: Theory & Practice," Anderson & Mikhail, Dec 97, McGraw Hill Book Co. Available at <http://www.books.mcgraw-hill.com>
21. "GPS Satellite Surveying," Alfred Leick, 1990
22. "Photogrammetric Mapping," US Army Corps of Engineers Engineer Manual (EM) 1110-1-1000 (31 May 93), download from: <http://www.usace.army.mil/inet/usacedocs/eng-manuals>
23. "Side Scan Sonar Image Interpretation", "Sub-bottom Surveys", and "Side Scan Sonar and Magnetometer Surveys", Black Laser Learning <http://www.blacklaserlearning.com>
24. "GPS for Land Surveyors Second Edition" Jan Van Sickle 2001

NSPS Hydrographer Certification Exam

GENERAL INFORMATION

WHAT TO BRING WITH YOU

- Photo identification: Passport, current driver's license, government/military I.D., or current student I.D. card.
- At least (2) sharpened Number #2 pencils with erasers.
- Approved scientific calculator

Optional

- Reference materials

DO NOT BRING WITH YOU

- Cellular telephones
- Programmable computers
- Scanners
- Copying devices
- Recording Devices
- Note paper

EXAMINATION CONTENTS

- The examination questions will apply to coastal waters and inland waterway systems of the United States and its territories.
- This examination consists of (160) multiple-choice questions. Examinees will have 3 hours to complete the examination.
Topics areas include depth measurement, vessel positioning, horizontal and vertical control, tides and water levels, survey planning, nautical science and general marine science. Questions from related fields such as cartography and photogrammetry may also be included.

EXAMINATION DATE AND TIME

Confirmation of your assigned examination time, date and location will be sent via certified mail. You must arrive and sign in at the test location by the assigned time or you will not be allowed to take the examination.

SIGNING-IN

You will be directed to place your signature on the Sign-In Roster and provide the proper photo identification to the exam proctor. Persons without the proper identification will not be allowed to take the examination.

TEST SECURITY

The proctor has the authority to dismiss any examinee from the testing room and confiscate examinations for any of the following reasons: impersonating the examinee of record, aiding another examinee, receiving help from another examinee, looking at another examinee's test or materials, attempting to remove or copy exam materials, attempting to take notes about the exam.

Revealing examination contents is prohibited. The NSPS Hydrographer Certification Board may revoke or deny certification, now or in the future, to anyone found divulging exam contents.

The NSPS Hydrographer Certification Board may, at its discretion, require a examinee to take a replacement exam if the Board feels exam security has been breached.

EXAM RESCHEDULING

You must provide written notification to the NSPS Headquarters office (30) days prior to your assigned examination date if you are unable to take the certification exam. If notice of cancellation is not received 30 days prior to the exam date the examination fee will not be refunded.

NOTIFICATION OF SCORES

Examinees will be notified of scores within approximately 30 days of the testing date. Notification will be sent by mail.

APPEALS

If an examinee has been denied certification by the Certification Board, that applicant may appeal to the Chairperson of the Certification Board for reconsideration. Examinees will have (30) days from the date on the examination results letter, to appeal to the Chairperson of the Certification Board by notifying the NSPS liaison in writing within (30) days from the date on the denial notification. The appeal must include the reasons for the appeal based on the application requirements. If the Chairperson believes that an error may have been made during the certification process, the Chairperson can direct the Certification Board to reconsider the application.

Applicants may appeal the Certification Board Chairperson's decision by notifying the NSPS liaison in writing within (30) days from the date on the appeal notification from the Chairperson of the Certification Board. This second appeal will be forwarded to the President of NSPS for consideration and final resolution.

EXAMPLE EXPERIENCE RECORD

Engagement Number	Dates From – To mm/yy –mm/yy e.g. 09/98 -12/02 Months e.g. 51 months	Position Title and Organization	Months, Non-Surveying Non-Engineering Not Hydrography	Months Surveying/Engineering Not Hydrography	Months Hydrography (total)	Months Hydrography (in technical charge)	Months Hydrography (in field)
1	6/84-8-84 3 months	Exchange student, Johannesburg, South Africa	3				
2	8/84-6/88 47 months	Undergraduate Student, Lenoir-Rhyne College, Hickory, NC	47				
3	7/88-3/93 57 months	Graduate Student, University of North Carolina at Wilmington, Wilmington , NC	23				
		Research Diver and ROV Operator/Technician NOAA National Undersea Research Center at the University of North Carolina at Wilmington, Wilmington , NC		34			
4	4/93-4/99 73 months	Chief ROV Pilot/Technician NOAA National Undersea Research Center at the University of North Carolina at Wilmington, Wilmington , NC		73			
5-13	5/99-3/06 82 months	Hydrographer, Lead Hydrographer & Vessel Service Center Manager, SAIC, Inc. Newport, RI In order to show significant activities, this period of employment is broken down into nine engagements.		4	78	52	53.5
	262	Total Months Experience 262	73	111	78	52	53.5

Description Of Positions Involving Hydrography Applicant # _____ (NSPS use only)

Engagement #__5_ Position Title: Hydrographer, Technician, Lead Hydrographer

Firm: SAIC, Inc.

Person most familiar with your performance: Jim Smith

Address: SAIC, Inc., xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 92%, this percentage applies to the entire time in this period of employment. 52 months of Hydrography, 31 months in technical charge, and 38 months in the field apply to this description.

Detailed description of your work in the position:

I have been involved in conducting hydrographic surveys on various NOAA charting contracts for approximately 7 years. My responsibilities have ranged from sitting real time, running the data collection and navigation software (ISS- 2000), operating side scan sonars (Klien 5000, 2000, 3000, 595.), USBL positioning systems (Track point II). Multibeam (Reson 8101,8111,8125) and single beam echo sounder (Odom EchoTrak). Survey suites have also included, SAIC's ISS-2000 and Saber, Sonar Pro, and Triton Elics Isis, POS/MV, Trimbile 7400 DGPS, BOT's MVP-30, Seabird Seacat 19 and 19 plus, and Robertson AP-9 auto pilots. I have been responsible all maintenance and repairs for all systems used in support of the NOAA surveys. In my role as lead hydrographer I have been responsible for reviewing the statement of work, producing survey plans and time estimates for survey, creating water level files, establishing system acceptance test procedures and patch test procedures. I have conducted patch test for various vessels and configurations and have been responsible for logging and reporting the results in ISO_9001 compliant documents. While in the field I have been responsible for directing survey operations, applying correctors to data, conducting data analysis to ensure data quality, and coordinating personnel, vessel and shipping needs. Once the survey has been completed I have been responsible for final data processing, production of final reporting such as data acquisition and processing reports, vertical and horizontal control reports, descriptive reports and smooth sheet production. Currently I have signed off on 4 smooth sheets and associated reports under NOAA contracts.

Engagement #__6_ Position Title: Hydrographic Watch Stander

Firm: SAIC, Inc.

Person most familiar with your performance: Gary Jones

Address: SAIC, Inc., xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 100% 4 months of hydrography and 4 months in the field apply to this engagement.

Detailed description of your work in the position:

Hydrographic watch stander on a cable route survey from the shore of Long Island, NY to 1500 meters water depth. Ran the data acquisition and navigation software (ISS2000), operated the side scan sonar (DataSonics SIS-1000) with a cesium magnetometer(Geometrics G-880), USBL positioning systems (Sonardyne and Simrad HPR-410), and multibeam echo sounder (Elac 1055). I monitored data quality and coordinated the survey plans with the helmsman of the vessel. I was in charge of deck operations including launch and recovery of the side scan sonar and magnetometer, the gravity core sampler, and the CTD (Seabird SBE 19) casts. I was responsible for maintenance and repair of the various systems. After completion of the survey operation I was involved with the demobilization efforts and in compiling the final technical report.

Engagement #__7_ Position Title: Position Title: Vessel Service Center Manager

Firm: SAIC, Inc.

Person most familiar with your performance: Rob Esterbrook

Address: SAIC, Inc., xxx

Telephone: xxx-xxx-xxxx

navigation unit. My responsibilities were to serve as the lead hydrographer, produce survey plans and schedules as needed, sit as real time watch stander, and be the lead equipment technician. I was responsible for identifying a suitable area to conduct patch test of the system prior to starting survey and generate line plans for the patch test. I oversaw all aspects of data collection and processing. I reviewed and analyzed the multibeam and multibeam side scan sonar data, conducted quality assurance and quality control procedures on the data. I was responsible for final data quality and reviewed the project reports for delivery.

Engagement #__10_ Position Title: Lead Hydrographer, Student

Firm: SAIC, Inc.

Person most familiar with your performance: Gary Roberts

Address: SAIC, Inc., xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 100% 0.5 month of hydrography applies to this training.

Detailed description of your work in the position:

Student in the Multibeam Hydrography Short Course, Toronto, Ontario, Canada, presented by the University of New Hampshire, the University of New Brunswick.

Engagement #__11_ Position Title: Lead Hydrographer

Firm: SAIC, Inc.

Person most familiar with your performance: Dr. John Geologist

Address: Center for Coastal and Ocean Mapping, xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 100%, 8 months hydrography, 8 months in technical charge, and 4 months in the field apply to this description.

Detailed description of your work in the position:

United Nations, Law of the Sea Survey

I was SAIC's lead hydrographer for two of the three legs of a survey conducted in a TAGS-60 survey vessel from August to November 2004. During mobilization I was responsible for installing software that was to be used by SAIC in processing, quality assurance, and product generation. The survey system comprised a Simrad EM-121A multibeam sonar with calibrated acoustic backscatter, Ocean Data Equipment PDDD2000-3.5 kHz sub-bottom profiler, Hippy 120b attitude system, Sperry MK 39 gyro, Seabird 9 plus CTD, Sippican T~5 T-7TIO XBT's, AML SV &T sound velocimeter, integrated into an ISS-60 data acquisition system I was responsible for cleaning the multibeam data in SAIC's SABER software and updating all header information. I would then create associated metadata files for all multibeam data files. Data were then gridded and reviewed using a variety of QC tools to ensure data quality. Metadata files were then generated for all gridded data products. The raw, processed, multibeam xyz data and gridded xyz data were then transferred to the onboard NOAA/UNH representative Dr. John Geologist. After completion of the 2004 survey effort I was responsible for compiling the final data products and final report.

Engagement #__12_ Position Title: Lead Hydrographer, Student

Firm: SAIC, Inc.

Person most familiar with your performance: Gary Roberts

Address: SAIC, Inc., xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 100% 0.5 month of hydrography applies to this training.

Detailed description of your work in the position:

Student in the Tides and Water Levels for Hydrographers course presented by NOAA NOS CoOPS and the University of New Hampshire. Theory of astronomic tides. Meteorological influences on water levels, collection of water level data, computation of datums computation and application of water level correctors, zoning for water level correctors.

Engagement #__13_ Position Title: Lead Hydrographer

Firm: SAIC, Inc.

Person most familiar with your performance: Cash E. Reviele

Address: NOAA, xxx

Telephone: xxx-xxx-xxxx

Percentage of time your work involved hydrography: 100%, 5 months hydrography, 5 months in technical charge, and 5 months in the field apply to this description.

Detailed description of your work in the position:

NOAA Survey Services in a NOAA time charter vessel.

In year 2 of the NOAA survey services contract, I was SAIC's lead hydrographer responsible for over seeing the re-mobilization of the R/V Davidson and its 2 launches. The equipment suite consisted of Reson 8111, 8101, and 8125 multibeam sonars, Reson 515 and Ross 875 single beam sonars, a Klein 5500 and two Klein 3000 side scan sonars, Seabird SBE 19 and 19 plus CTDs, SAIC's ISS-2000 and SABER surveying software, Klein sonar pro, Triton-Elics ISIS software and a POS/MV navigation units. After completion of the remobilization I was responsible for conducting a patch test on all three vessels. It was my responsibility to locate a suitable patch test site, build the patch test survey and survey schedules, direct each vessel in performing the patch test components, evaluate the data, establish offsets, and confirm overall system performance. Once all three vessels were configured properly and data quality was confirmed I was then responsible for overseeing all data collection and processing aspects of the hydrographic survey before data products were delivered to the onboard NOAA team. I worked directly with the customer (NOAA) onboard the vessel, defining the survey plan and objectives. After defining the survey plans and objectives I would compile a survey schedule and coordinate the survey effort with SAIC personnel, sub-contracting personnel, and the various ships' crew. Data were processed and quality control tests were performed to ensure data quality. Once the data were processed and quality verified I would pass the data to the onboard NOAA team. In addition to data collection and processing, I was responsible for conducting and overseeing all maintenance and repairs performed on the survey equipment. I was also responsible for relaying survey information from the field to the project manager and operations manager in the "home office" via voice and electronic communications on a daily basis.

PARTIAL EXAMPLE EXPERIENCE RECORD

Engagement Number	Dates From – To mm/yy –mm/yy e.g. 09/98 -12/02 Months e.g. 51 month	Position Title and Organization	Months, Non-Surveying Non-Engineering Not Hydrography	Months Surveying/Engineering Not Hydrography	Months Hydrography (total)	Months Hydrography (in technical charge)	Months Hydrography (in field)
1	04/97-07/98 16 months	Student, xxxxx Technical College, xxxxxx, XX Associates Degree in Engineering Technology	16				
2	08/98-07/99 12 months	Field Surveyor, 11111 Co., XXXXX, XX		4	8		8
3	8/99-03/00 8 months	Field Surveyor, 22222 Co., XXXXX, XX		2	6		6
4	04/00-09/00 6 months	Field Surveyor, 33333 Co., XXXXX, XX		2	4		4
5	10/00-02/06 66 months	Project Engineer, 44444 Co., XXXX XXX Co., XXXXX, XX		13	53	53	45
6	03/06-07/07 16 months	Survey Tech/Project Manager, 55555 Co., XXXXXXX, XX		4	12	12	8
	124 months	Total Months Experience 124	16	25	83	65	71