

FRIDAY WORKSHOPS

(W-1) PSI-PCI Visual Cylinder Inspection & Hazmat Training (VCI),

Presenter: Mark Gresham, Friday 8:00 AM - 5:00 PM. Holiday Inn Teterboro Room

Sponsor PSI-PCI (Professional SCUBA Inspectors)

PSI-PCI is recognized industry-wide as the gold standard for training and support in the visual inspection of high pressure cylinders. It is the ONLY training endorsed, recognized and utilized by cylinder manufacturers and recognized by USDOT and CGA.

This certification course teaches proper handling and visual inspection of cylinders from THE ONLY manufacturer endorsed/recognized training available. Learn all aspects of visual inspection for aluminum, steel and composite cylinders. In-depth program touches on other cylinder related subjects. Training and hands-on practice prepare students to inspect cylinders to applicable standards.

This course in the visual inspection of SCUBA, SCBA and other high pressure cylinders prepares and trains the graduate to professionally and thoroughly inspect breathing gas cylinders. PSI-PCI training is recognized by US courts as meeting the definition of someone who has been formally trained and PSI-PCI support for their inspectors is without equal. Completion also satisfies the OSHA requirement for hazardous material (HAZMAT) training for all employees who fill, use or otherwise handle high pressure gas cylinders.

Limit 50 Fee \$350.

(W-2) PSI-PCI Visual Cylinder Inspector REFRESH Course (VCIR),

Presenter: Mark Gresham, Friday 8:00 AM - 5:00 PM. Holiday Inn Teterboro Room

Sponsor: PSI-PCI (Professional SCUBA Inspectors).

For previously trained PSI-PCI Visual Cylinder Inspectors that are outside 3 year recurrent training period, take this course at alumni rate to renew. Pre-requisite: Previous PSI-PCI Visual Cylinder Inspection Training.

Limit 50 Fee \$225

SATURDAY WORKSHOPS

(W-3) PSI-PCI Visual Cylinder Inspector Annual UPDATE

Presenter: Mark Gresham, Saturday 8 AM - 10 AM, Holiday Inn Teterboro Room

Sponsor: PSI-PCI (Professional SCUBA Inspectors);

PSI-PCI Inspectors within their three year recurrent training window may use this 2 hour Update to meet renewal requirements. Up to date information presented to keep inspectors abreast of latest rules, news and trends in the cylinder industry. Meets federal standards for recurrent training requirements. Pre-requisite: Current PSI-PCI Visual Cylinder Inspection Training.

Limit 30 Fee \$195

(W-4) PSI-PCI Valve Repair Technician,

Presenter: Mark Gresham, Saturday 10:30 AM - 12:30 AM Holiday Inn Teterboro Room.

Sponsor: PSI-PCI (Professional SCUBA Inspectors).

The valve can be the most neglected piece of dive ensemble. This course provides manufacturer approved training for maintenance and repair of scuba valves. Very hands on course steps through disassembly, parts and reassembly of the valve. Valve schematics from various manufacturers included. Students receive Certificate of Completion.

Limit 30 Fee \$195

(W-5) PSI-PCI Oxygen Cylinder Cleaning Technician.

Presenter: Mark Gresham, Saturday 1:30 PM - 3:30 PM, Holiday Inn Teterboro Room,
Sponsor: PSI-PCI (Professional SCUBA Inspectors).

The PSI-PCI Oxygen Cylinder Cleaning Technician course offers information and inspection training specific to cleaning oxygen service cylinders. The course has been created by true experts and engineers in the gas industry on the subject of oxygen/enriched air service cylinders. Students receive Certificate of Training. Pre-requisite: Current PSI-PCI Visual Cylinder Inspector

Limit:30 Fee:\$195

(W-6) PSI-PCI Eddy Current Technician.

Presenter: Mark Gresham, Saturday 4 PM - 6 PM, Holiday Inn Teterboro Room,
Sponsor: PSI-PCI (Professional SCUBA Inspectors).

PSI-PCI makes sense of the SCUBA industry confusion surrounding eddy current testing in this program. Students learn federal regulations applicable to testing, hands-on instrument training and testing process. This program will clear up the mystery of eddy current testing following federal and manufacturer's requirements. Students receive Certificate of Training. *Pre-requisite: Current PSI-PCI Visual Cylinder Inspector*

Limit:30 Fee:\$195

(W-7) Photogrammetry For Beginners

Presenter: Christopher Drew Saturday 9 AM - 12 PM Holiday Inn Holitech Room,

The Future of Rapid 3-D Survey Back this year, by popular demand! Take your shipwreck diving and survey skills to the next level by building a 3D model just minutes after your dive. With a camera, laptop, and scaled dive-site, we will create your first model, step-by-step. Handouts will be provided for a convenient reference guide!

Ready to take your shipwreck diving and survey skills to the next level, or curious about art in rapid digital survey? Starting from the ground-up, we will review current survey techniques before introducing photogrammetric survey. With little more than a camera, an accurate baseline, the right software, and know-how, you can build scaled-3D models in just minutes after your dive! This technique has revolutionized land-based archaeology and is now being implemented underwater. All required software will be supplied, and we will go step-by-step through the entire workflow to create your first model. Handouts with notes will be provided, so you can focus on the task-at-hand... and have a convenient reference guide for the future!

Additional info:

STUDENTS PLEASE BRING:

1. Mac or PC, running Windows 7, 10, or OS X, recommended: ≥ 8 GB RAM and ≥ 3 GHz CPU.
 - a. Software to be installed ahead of time: Agisoft PhotoScan Pro [DEMO LICENSE]
 - i. <http://www.agisoft.com/downloads/request-trial/>
 - ii. Please do not activate the demo license until ~1 week before BTS!
 - b. If you're not able to bring a computer, you can still work with others!
2. Camera or smartphone – we will be simulating a dive over a scale model shipwreck in the classroom. This will let you take your own photos to practice the needed swim pattern routing.
3. Pencil/pen, paper, flash drive, and excitement!

SUPPLIED IN COURSE:

1. All software (linked version will give unlimited practice afterwards) for class
2. Scale model for photos and modeling practice
3. Detailed instruction and troubleshooting
4. Handouts & Certificates
4. Handouts & Certificates

Limit:30 Fee:\$80

(W-8) Title: Photogrammetry 2: Intermediate Topics in 3-D Survey

Presenter: Christopher Drew Saturday 1 PM - 4 PM Holiday Inn Holitech Room

This workshop will expand your knowledge and practice of photogrammetric survey! With a focus on hands-on learning we'll be covering object masking, accurate scaling of models for survey, leveraging remote GPU-array supercomputers with cloud-based virtual-desktop workflows, Free-Open Source Software (FOSS) alternatives, chunking for larger models, and publishing.

Additional info:

STUDENTS PLEASE BRING:

1. Mac or PC, running Windows 7, 10, or OS X, recommended: ≥ 8 GB RAM and ≥ 3 GHz CPU.
 - a. Software to be installed ahead of time: Agisoft PhotoScan Pro [DEMO LICENSE]
 - i. <http://www.agisoft.com/downloads/request-trial/>
 - ii. Please do not activate the demo license until ~1 week before BTS!
 - b. If you're not able to bring a computer, you can still work with others!
2. Camera or smartphone – we will be simulating a dive over a scale model shipwreck in the classroom. This will let you take your own photos to practice the needed swim pattern routing.
3. Pencil/pen, paper, flash drive, and excitement!

SUPPLIED IN COURSE:

1. All software (linked version will give unlimited practice afterwards) for class
2. Scale model for photos and modeling practice
3. Detailed instruction and troubleshooting
4. Handouts & Certificates
4. Handouts & Certificates

Limit:30 Fee:\$80

(W-9) A Complete Lightroom Immersion

Presenter: Jennifer Idol Saturday 1 PM - 4 PM Holiday Inn Sussex Room

Learn how to enhance your underwater photography with simple photo editing principles. Using Lightroom for Mac, we'll review file management and workflow techniques. Bring 3 photos for editing and laptop with Lightroom Classic CC installed, not just CC, for this in-depth workshop. All attendees receive a course packet with tips.

Jennifer Idol is the first woman to dive 50 states and author of *An American Immersion*. She's earned 29 certifications and has been diving for 22 years. A technical diver and award-winning underwater photographer, she's published in publications including *Scuba Diving*, *DIVER* and *Sport Diver*.

Limit: 20 Fee:\$80

(W-10) Underwater Photography Part 1 -- an easy start from A (aperture) to Z (zoom)

Presenters: Cathy Church Saturday 9 AM - 12 PM Holiday Inn Essex Hudson Room,
This 3-hour workshop is for beginners or intermediate photographers who want to especially learn what settings are optimum to make lovely photos with any camera. It includes information for divers using cameras such as Sealife, Olympus Tough and other cameras with limited or no f-stop and shutter speed controls. It is also excellent for those who want to get started by using automatic/program modes rather than full manual exposure controls, or for those who are taking both workshops this week-end.

It will cover all aspects of using the best settings for better background exposures and prettier foregrounds, optimum white balance settings, use of add-on lenses, understanding depth of field, best techniques for optimum focus, when to use zoom or wider lenses, etc. You will learn Cathy's favorite creative lighting techniques for more beautiful photos with any system.

Starts with optimum settings for any camera. This is a hands-on workshop, bring your camera (and an extra battery and your owner's.) **You must e-mail Cathy in advance at cchurch@cathychurch.com and tell her what brand and model of camera and housing you have. She will send you a hand-out of her recommended settings specifically for YOUR camera** and how to find each setting that she discusses. She will also send you a handout on the basics of exposure. As everyone says "Cathy takes a complex topic and makes it clear." Her humorous, easy-to-understand approach has made her the country's most popular photo instructor. This workshop is LOADED with helpful info and tips. Go to www.cathychurch.com for complete details.

Limit 30 Cost: \$80 Signup for W-10 and W-16 Together for \$140

(W-11) Safety Procedure For Sport And Public Safety Diving Ice Diving – Looking At The Reality Of It.

Presenters: Butch Hendrick Saturday 12:15 PM - 2:15 PM Holiday Inn Essex Hudson Room
The whole environment changes during winter months. Sites you dove all summer are extremely different when the surface freezes. They require different planning, setup, equipment, procedures, personal protection, and personnel. A simple lake becomes a confined space, overhead environment that can cause a tank to empty in under 2 minutes during a first stage free flow, fingers too incapacitated to release weights, and unintentional immersion of surface personnel. Some environments will offer far superior visibility, opportunities to play with mercury-like air bubbles trapped under the ice, better delineated search areas, and observations of hibernating aquatic life. Ice diving can be as safe as any diving as long as proven, evidence-based standards and procedures (SOPs) are followed. Previous ice diving deaths absolutely would have been prevented if these SOPs had been followed. Learn how to keep everyone safe whether your mission is to create beautiful under-ice photos, enjoy the adventure, or search for drowning victims and evidence. Take W-11 and W-15 together for 60 dollars. (remove) - W-15 is a \$70 workshop

Limit:20 Fee:\$40 No Wristband unless combo is purchased

W-11 and W-12 Together for \$70

W-12) How To Safely, Comfortably Dive With Full-Face Masks (Ffms) And How To Teach Others To Do So

Presenter: Butch Hendrick, Saturday, 2:30 PM - 4:30 PM Holiday Inn Essex Hudson Room
FFM's allow verbal communication amongst divers and surface support, decreased heat loss in cold water, some protection from water contamination, larger fields of view, and a greater level of safety in currents and situations that go bad. There are common errors used and taught in regards to donning, using, and doffing FFM's that are easily corrected and that will improve FFM dives. Every FFM diver should be able to comfortably doff, don, and clear masks underwater. Learn the most effective FFM procedures and how to maintain your skills.

Limit 30: Fee:\$40 No Wristband unless combo is purchased Signup for W-11 and W-12 Together for \$70

(W-13) Wound Closure And Bleeding Control

Presenter: Chantelle Newman Saturday 9 AM-12 PM Holiday Inn Union Warren Room
On an Expedition or at a remote setting?, Sometimes things go wrong and you will not have access to Emergency Care for hours or days, so it's up to you have the skills. This workshop teaches you how to treat major wounds. First stop the bleed, then treat the injury with Glue, Steristrips, Staples, or Sutures.

Chantelle Newman is a publisher, Course Director, DAN Europe Area Manager for the UK, Women Diver Hall of Fame member, Member of the Explorers Club, Course Creator, Diver Medical Technician Instructor Trainer, DAN Europe Instructor Trainer, Diver Safety Pioneer.

Limit:30 Fee:\$70 Signup for W-13 and W-14 Together for \$120

(W-14) What Could Go Wrong On A Diving Expedition

Presenter: Chantelle Newman Saturday 1 PM - 4 PM Holiday Inn Union Warren Room
Workshop aimed at Expedition Divers or Divers visiting remote areas. Subjects covered: Sea Sickness, Prolonged Salt water exposure, Trauma Injuries, Immersion, Post submersion and unconscious patient, Hyperthermia and Hypothermia, Dehydration, Improvised Medicine and Medical Kits

Limit:30 Fee:\$70 Signup for W-13 and W-14 Together for \$120

(W-15) Proactive Dive Planning For New Divers Through Course Directors

Presenters: Butch Hendrick & Andrea Zaferes Saturday 9 AM - 12 PM Holiday Inn Sussex Room
Fantastic dives require strong, safe, plans engendering realistic confidence. Planning involves more than gas, depth, time variables. Consider loss of buddy/group or boat; entanglement management, visibility loss, current, equipment issues, or becoming out-of-breath. Practiced plans allow you to depend on yourself, not just on dive leaders or buddy

Limit 20: Fee:\$70

SUNDAY

(W-16) Uw Photography Part 2: "Lighting--Tried And True And Cutting Edge, Too." (Intermediate – Advanced)

Presenters: Cathy Church Sunday 9 AM - 12 PM Holiday Inn Essex/Hudson Room
Covers the use of exposure controls with external strobes and all aspects of underwater lighting from ambient light to strobes and constant light sources for primary lighting and balanced flash fill. Cathy shares her creative lighting tips and makes sure that you understand how this all works with YOUR particular camera and lighting system.
Her humorous, easy-to-understand approach has made her the country's most popular photo instructor.

You must e-mail Cathy in advance at cchurch@cathychurch.com and tell her what brand and model of camera and housing you have. She will send you a hand-out of her recommended settings specifically for YOUR camera .and lighting system YOU have. She will also send you a two-page handout to read in advance. This is very important so that she can be sure to have answers that YOU need.

Limit 30 Cost: \$80 Signup for W-10 and W-16 Together for \$140

(W-17) Ultimate Underwater Movement For All Divers

Presenters: Andrea Zaferes & Butch Hendrick, Holiday Inn Sunday, 9:00 AM.-12:00 PM Holiday Inn Union Warren

Whether you want to gracefully move inches across a reef in current without touching it or work horizontal and face-up inside a submerged vehicle in blackwater, this workshop will present you with gear-trim, breathing, and body movement techniques to practice in order to move in ways you never thought possible. Includes handout material, wall certificate of completion, and a video on a CD.

Limit30: Fee:\$70

(W-18) Diving And Swimming With Whales And Dolphins: The Good, The Bad And The Ugly.

Presenters: Paul Forestell, Sunday 9 AM - 12 PM Holiday Inn Sussex Room

Whale and dolphin watching is an annual billion dollar global industry with an increasing demand for in-water encounters in the wild. This workshop will cover: marine mammal species, distribution, behaviors, and migratory patterns; overall conservation status and research findings on human impacts; species and locations targeted for in-water encounters; safety and conservation practices to ensure successful encounters with marine mammals in the wild. Paul earned a Ph.D. from University of Hawaii. He studies marine mammal learning and behavior, and marine tourism education, and published 100 books, book chapters and scientific papers. He was faculty at Southampton College; Provost at Long Island University; and VP for Academic Affairs at Keuka College (NY). Paul is currently Director of International Programs with Pacific Whale Foundation, Hawaii.

Limit: 20 Fee: \$40.No Wristband given with this workshop

(W-19) Lightroom Bootcamp For Beginners

Presenters: Erin Quigley Sunday 9 AM -3:00 PM Sunday Holiday Inn Holitech Room,

Take your editing to the next level with this fun and intensive hands-on workshop. This workshop covers Lightroom Classic for beginners, from importing images to developing and export. You'll need a computer running Lightroom Classic, and at least one external hard drive. Practice files, flash drive and workbook are included.

Erin Quigley is an Adobe certified expert specializing in post-production techniques specifically developed for underwater shooters. She's an award-winning photographer, a member of the Women Divers Hall of Fame, Boston Sea Rovers, and Ocean Artists Society. Erin writes the Imaging Techniques column for Scuba Diving magazine, and teaches workshops worldwide.

Limit 20 Fee \$175