

Professional Capacity Building for Marine Protected Areas in the Philippines

Final Report

1999 – 2004 SEAEI/EAPEI CLOSEOUT REPORT

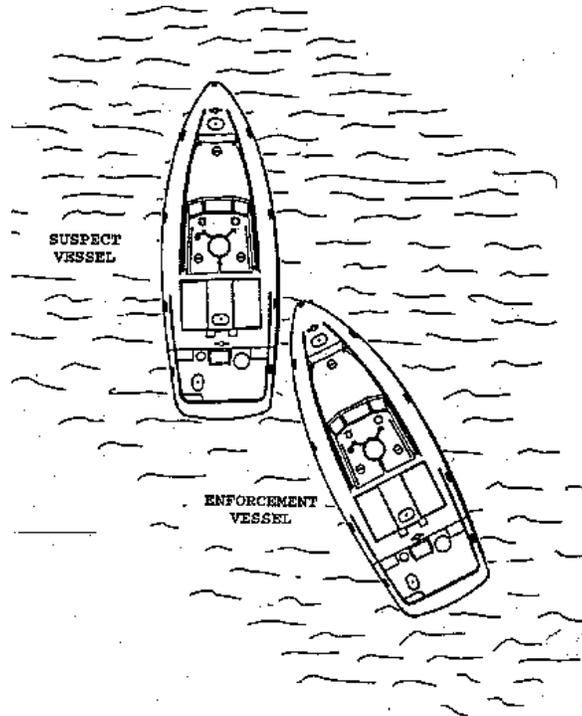
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SEAEI/EAPEI CLOSEOUT REPORT

IAA ENV-P-00-98-00001-00, Amendments #2, #4

US DEPARTMENT OF THE INTERIOR and US AGENCY FOR INTERNATIONAL DEVELOPMENT

I. OBJECTIVES

The objective of this project was to access DOI expertise and experience to support the East Asia and Pacific Environmental Initiative (EAPEI) Program goals, under:

- Goal B: Improved Coastal Resources Management
- Objective B.2. Improved Marine Biodiversity Conservation
- Activity (16) Professional Capacity Building for Marine Protected Areas.

Within these program goals, DOI was expected to provide human capacity development and training in coral reef protection and management to resource professionals, complementing the World Wildlife Fund/Philippines (WWF/Philippines) program in the Sulu-Sulawesi Eco-Region. The DOI efforts would target a multi-sector audience, including regional, municipal, community, and non-governmental organization (NGO) marine patrol staff. DOI was to coordinate with WWF/US, USAID/Philippines, USAID/Washington, and EAPEI staff, and rely on WWF/Philippines for logistical support, regular communications with the Philippine government agencies, programmatic guidance and other non-financial support.

Although DOI provided the primary instructors, additional instructors were drawn from the Philippines Navy, Coast Guard and Fisheries Service, WWF-Philippines, and local governments to integrate specific local laws, procedures, and customs into the overall training. Further, such a strategy provided a forum for government and nongovernmental organizations (NGO) representatives to interact and build contacts and professional relationships.

A. Mechanism:

DOI was accessed through the Interagency Agreement (IAA) #ENV-P-00-98-00001-00, Amendment No. 2, signed between the U.S. Agency for International Development (USAID) and the U.S. Department of the Interior (DOI) on September 9, 1999, covering the period through September 30, 2001. A total of \$46,250 was obligated to this project, as described under

Annex 2 of this IAA. This IAA was subsequently extended through March 31, 2004, via a no-cost Amendment No. 4, dated September 15, 2003.

B. Background:

Two-thirds of the earth's coral reefs are dying, threatened with degradation by pollution, over-fishing, and overuse. Up to 10 percent of coral reefs worldwide have already been degraded beyond recovery. The International Coral Reef Initiative estimates that 48 percent of South East Asian reefs will be depleted in the next 10 to 20 years, if the nations of the region do not take effective measures to ensure sustainable use of the coral reef resources. The loss of coral reefs, known as the rainforests of the sea, is among the gravest of ecological tragedies.

Southeast Asia boasts over 30 percent of the world's coral reefs, most of which are among the most diverse and the most threatened. People in the region extract approximately two-thirds of their animal protein from seafood. The economies of many atoll and coastal nations are based on marine resources, whose building blocks are coral reef ecosystems that provide habitat for commercial fish and shellfish species, and protect coastlines. Coral reef ecosystem degradation would significantly limit food supplies to growing populations and would devastate commercial fishing and tourist industries. Unless integrated coastal zone management is implemented in Southeast Asia, these coral reefs and their associated marine life may become irreversibly depleted within two generations.

Nowhere in the world can one find the richer variety of coral reef plant and animal life than in the Sulu and Sulawesi seas. Surrounded largely by the Philippines, Indonesia, and Malaysia, the seas contain about 450 species of coral (compared to only 60 in the entire Caribbean). The people of the Sulu-Sulawesi Seas depend on marine resources both for subsistence and commercial livelihoods. The area supports several million inhabitants and a several billion US dollar per year fishing industry. The long-term stability of this Eco-Region's marine resources is essential both to local livelihoods and to economic stability in the region.

The Philippines boasts some of the most diverse coral reef resources in the world and is a popular tourist destination for scuba divers and others who wish to visit a resource unrivaled elsewhere. Among other problems, they are under threat from destructive fishing practices (primarily cyanide and dynamite fishing), and poor boating habits (e.g., anchor drag, improper gear disposal). Marine laws in near shore waters in the Philippines are patrolled by municipal groups (Bantay Dagats) and NGOs (e.g., WWF), who do not have adequate training in marine patrolling, functioning gear, or clear directives on what they are able to do to prevent destructive fishing and improper boating. With improved skills, clear directives and better management, near shore patrols will be able to safeguard coral reefs into the future and better ensure their resultant economic benefits in coastal communities.

SOUTHEAST ASIA



802914AI (R02108) 6-02

C. Activities:

DOI proposed to train and build skills in marine patrolling for law enforcement for Philippine governmental agencies and NGOs with jurisdiction and responsibility in protecting the marine environment. The DOI activities completed under this program consisted of:

1. 1999 Law enforcement assessment trip
2. 2000 Law enforcement training workshop in the Batangas Province,
3. 2004 Follow-up law enforcement training course in the Batangas Province

Brief summaries of these activities follow.

1. 1999 Law Enforcement Assessment Trip - Activities

In December 1999, Christopher Snipes (DOI International Project Manager) and Carolyn Wiley (U.S. Federal Law Enforcement Training Center, Program Specialist) conducted an assessment trip to the Philippines to identify coral conservation and marine law enforcement skills training needs for the DOI Office of International Affairs and the U.S. Agency for International Development. This DOI team worked closely with WWF/Philippines to design the training curriculum, identify appropriate training sites, and generate a list of participants.

2. 2000 Law Enforcement Training - Activities

In February-March of 2000, a DOI team of three marine law enforcement specialists - Carolyn Wiley, who also participated in the 1999 DOI Assessment Trip, Janet Kirwan (DOI-National Park Service), and Buff Wiley (Florida State Parks, who participated at his own expense) - conducted a 2-week training on basic marine boating and law enforcement skills in the Batangas Province, Philippines. The training included a total of thirty-eight participants from local "Bantay Dagats" (community-based sea watch patrol teams) and NGO representatives who have responsibilities in marine law enforcement in the Philippines near shore waters and marine protected areas. The sessions included training in basic patrol and arrest techniques, collection, preservation and courtroom presentation of evidence, fish identification, local marine law, interagency coordination and basic boating and safety.

3. 2004 Law Enforcement Training

In February 2004, DOI led a 6-day follow-up inter-agency marine law enforcement training in the Batangas Province, Philippines, with Carolyn Wiley, Janet Kirwan (repeat instructors) and Bill Schaff (DOI-U.S. Fish and Wildlife Service) serving as the primary instructors. The course participants were drawn from nine provinces (Batangas, Palawan, Negros Occidental, Quirino, Tawi-Tawi, Sorsogon, Oriental Mindoro, Occidental Mindoro, and Isabela) and included local protected areas superintendents,

park/forest rangers, Bantay Dagat members, local government unit staff (either municipal or provincial level), and local Philippine National Police officers.

The curriculum for this training session was modified from the 2000 course to accommodate the reduced course time and address specific requested needs. As such, not covered during the 2004 training were Photography of Evidence, CPR, First Aid, and the one mile open ocean swim. New curriculum items included specific vessel and equipment procedures, a two-hour case study block of instruction, two new practical exercises, and the participants developed an Underway Checklist for equipment and personnel readiness prior to each trip and a Marine Security Plan for their individual areas for dealing with terrorism and VIP visits.

II. RESULTS

DOI has received very positive feedback on the country's reception of the trainings and on how effectively new skills have been implemented by the Philippine government agencies and NGOs.

A. 2000 Law Enforcement Training - Results

The WWF/Philippines reported that the local Bantay Dagat (sea watch patrol teams), were very pleased with the DOI training in 2000:

SUCCESS STORY

“The training has greatly helped in improving the capacities of the local Bantay Dagat ... They spoke highly of the hands-on training (activities) such as those on board and search, charting and navigation, and apprehension. One key highlight of the Bantay Dagat operations in Mabini and Tingloy...is that there are no more commercial vessels encroaching in the municipal waters of Mabini and Tingloy. As a result, the municipal fishermen are able to catch more fish (both in terms of quantity and species of fish) and ... do not need to fish too far.”

Due to the high visibility and applicability of the 2000 training, twenty-two Philippine officers were selected to travel to the U.S. and successfully completed a two week “Small Craft Marine Law Enforcement Training Program” conducted at the Federal Law Enforcement Training Center in Brunswick, Georgia. This training was sponsored by the U.S. State Department.

B. 2004 Law Enforcement Training - Results

All of the participants in the 2004 training indicated that their expectations for the training were met. Some of the participants made initial plans during the 2004 DOI training to conduct similar trainings in their respective areas, targeting local marine enforcement officers and volunteers. Participants who planned to undertake follow-on training in their areas were from Puerto Galera, Oriental Mindoro; El Nido, Palawan and Donsol, Sorsogon. DOI will contact representatives from these areas to determine whether such follow-up trainings occurred and how DOI may best further assist.

In follow-up correspondence from WWF/Philippines, dated Nov 3, 2004, Luz Baskinas has shared a DOI training related success story and news article. She indicated:

SUCCESS STORY

“Two of the US-DOI trained local actors have been very instrumental in advancing marine enforcement in Donsol, Sorsogon, Philippines. The Mayor of Donsol sought the assistance of the President to help them stop illegal fishing. This is an excellent example of the results of the US DOI training done in the Philippines as well as other assistance from USAID assisted projects. We hope that DOI continues to provide similar trainings in the future, and perhaps include more policemen in the trainee-group.”

Ms. Baskinas then thanked our three trainers from the 2004 training. See Appendix A for further details on this success story.

C. Overall - Results

The former USAID/Philippines environment officer, Jerry Bisson, who recently returned to Washington DC, verbally expressed his satisfaction with DOI’s successful law enforcement work in the Philippines and was impressed by its low cost, as DOI does not charge for salaries of its training and technical experts.

SUCCESS STORY

Mr. Bisson verbally highlighted to DOI that, as a result of DOI’s work, the number of marine protected area staff deaths and injuries resulting from improper approach of boats containing suspected illegal poachers and fishermen has been greatly reduced over the last few years. He cited this as tangible evidence of the excellent positive impact DOI has made through its trainings, despite the limited number of tasks undertaken.

As a result of the successful and important work completed by DOI, with the assistance of WWF/Philippines as its in-country partner and Government of Philippines representatives as key additional instructors, USAID/Philippines chose to sign a Participating Agency Service Agreement (PASA) with DOI requesting further law enforcement technical assistance and trainings on a reimbursable basis. The PASA was signed in September 2004 and has a completion date of August 31, 2007.

III. EVOLUTION

USAID/Philippines, DOI, and its partners, ultimately decided to narrow its focus from a regional to a single-country approach due to the very limited funds available. As such, through this agreement, DOI worked only in the Philippines.

The second DOI training took place 4 years after the initial training. This follow-up training was delayed due to a variety of reasons, including post-9/11 security issues, avoidance of monsoon seasons, and lapses in communication between DOI and the field. These communication lapses have been corrected and should not cause future delays.

IV. BUDGET

The DOI budget provided by EAPEI for this program totaled \$46,250. With these funds, DOI covered all transport, lodging, meals and incidentals for all DOI travelers, trainees, and local instructors. Further, DOI covered the expenses for training equipment, materials, and supplies. A brief breakdown of the costs per event is presented below.

TOTAL BUDGETED	\$46,250
Dec 1999 Assessment Trip	\$7,985
April 2000 Training	\$20,521
March 2004 Training	\$18,139
<u>DOI Mgmt fee (20% of \$46,250)</u>	<u>\$6,250</u>
TOTAL EXPENSES	\$52,895
TOTAL BUDGETED	\$46,250
<u>MINUS TOTAL EXPENSES</u>	<u>- \$52,895</u>
OVERAGE	(\$6,645)

As shown, the actual costs of these activities exceeded the DOI budget by \$6,645. As such, DOI had to forego its management fee in order to meet project objectives. A more detailed cost breakdown is provided in Appendix B.

Important Note: DOI does not charge USAID for the salaries and benefits of the DOI experts while on assignment and, as such, considers these contributions to the program. For this program:

DOI contribution (salaries + benefits) is estimated to be \$24,300.

WWF/Philippines: Contributions made by DOI's partners in these efforts consisted of the critical in-country logistical support provided by WWF/Philippines during the assessment trip and both training sessions. Logistical support included assistance with scheduling and selection of the training venues, lodging reservations at training venues, selection and invitation of the training participants and local instructors, and assistance with reserving training equipment and materials. WWF/Philippines also provided critical on-the-ground direct communications before, during and after each training event and facilitated the delivery of DOI funds to several local venues on behalf of DOI.

V. PRODUCTS

In addition to the equipment donated to the participants during both training events, the main products of this program include the development of a Philippines-specific training curriculum and training materials. A summary of these products are listed below.

A. Equipment Donated by DOI in Feb 2000 Training - Products

Charts 5 per Student	Lines for Knot Tying
Parallel Rule	18 Sunglasses
Dividers	Baseball Caps
Handheld Compass	Lapel Pins
Disposable Cameras	Miniature Badges
Film	Writing Pads
Mechanical Pencils	Coffee Cups
# 2 Pencils	Fountain Pens
Pens	Raincoat
Pads of Notepaper	First Aid Supplies including two kits
2-Inch Notebooks	Sun Screen
Handouts	Toiletries
CPR Masks	Pocket Notepad

These items were donated by DOI, the US Federal Law Enforcement Training Center, and private individuals.

B. Equipment Donated by DOI in Mar 2004 Training - Products

The following list reflects some but not all of the items donated for use with the project:

- Evidence bags
- Rulers
- Motorboat Operator Competency Course Handbooks
- Calendars
- Calculators
- Address Books

- Dividers
- Roller Plotters
- Key Chains
- Lapel Pins
- Writing Pens and Pencils
- Hats
- Charts

- Parallel Rules
- Sunglasses

Portfolios
Office Supplies
Magnets
Patches
Shoelace

These items were donated by the following organizations:

DOI - Lake Mead National Recreational Area
DOI - United States Fish and Wildlife Service
DOI - Bureau of Reclamation
Alaska Department of Natural Resources
Las Vegas Metro Police Department
Nevada Department of Wildlife
United States Forest Service
Federal Law Enforcement Training Center in Artesia, New Mexico and in Glynco, Georgia.

C. DOI Marine Law Enforcement Training Curriculum - Product

DOI developed a series of PowerPoint presentations for the Philippines Program that were used in the training sessions. These presentations, combined with multiple field exercises, have proven quite popular and successful as teaching materials. The key topics included within the curriculum are:

Boat Handling
Chart Interpretation
Crew Overboard
MarlineSpike
Marine Patrols Methods
Meteorology and Heavy Weather
Pursuit, Stop and Approach
Terminal Performance Objective

A copy of the text only for each of the DOI PowerPoint presentations is found in Appendix C. The original PowerPoint presentations with photos and graphics were not included within this document due to size constraints. Electronic or hard copies of the original presentations are available upon request.

VI. CONCLUSION

A. Conclusions

The training participants expressed their enthusiasm for the course curriculum presented and noted that the accompanying hands-on exercises completed were very useful in enhancing their own enforcement skills and in teaching others what they learned. However, a more comprehensive program of training and reinforcement over an extended period of time, reaching a greater number of participants in key geographical areas, and continuing to involve representatives from the various governmental levels, NGOs, and local communities would better ensure the sustainability of more effective protection of the Philippines marine protected areas.

The U.S. State Department's Regional Security Officer (RSO) William H. Lamb expressed his enthusiasm and strong support of these activities during a meeting he held with the DOI trainers during the March 2004 training. RSO Lamb requested to be advised of any future training to allow his office the opportunity to contribute.

Due to the overwhelming interest in the training on the part of the participants and the related documented successes, USAID/Philippines, the training participants, and local NGOs have concluded that additional DOI law enforcement training would further enhance the capabilities already developed through this program.

B. Follow-Up

As follow-up, DOI is embarking on a new program of technical assistance in the Philippines focused on increasing capacity of local and national environmental law enforcement bodies. The program objective contributes to the mission of USAID/Philippines to strengthen the ability of national and local government units and communities to address critical threats to the country's coastal resources and promoting good governance – transparency and accountability – in enforcing environmental laws. This new work will build on this recently completed DOI law enforcement training in the Philippines. To initiate this new program, USAID/Philippines and DOI have signed Participating Agency Service Agreement (PASA) #492-P-00-04-00033-00 with USAID/Philippines requesting further law enforcement technical assistance and trainings on a reimbursable basis. The PASA was signed in September 2004 and has a completion date of August 31, 2007. Work on this new PASA is expected to begin in March 2005.

C. Recommendations

The following is a summary of the major recommendations made by course participants, as well as DOI and WWF/Philippines staff.

1. Monitoring of Course Impact:

The recommendation of the Project Leaders is that each of the participants who completed this course be surveyed at approximately one year from the date of the completion of this training. The survey would be conducted by WWF and the information provided to DOI. The survey would allow DOI to evaluate the effectiveness, usefulness and results of previously provided training and to incorporate suggestions of graduates into any future training. This survey would consist of the following questions:

1. Have you utilized the skills and information you obtained in the Coral Conservation and Marine Law Enforcement Skills training (CCMLEST)?
2. Have you apprehended violators utilizing the skills/information you obtained in the CCMLEST?
3. Are you presently employed in the conservation or law enforcement field?
4. If you are no longer in the conservation or law enforcement field, are you utilizing information or skills obtained in CCMLEST in your present position?
5. Have you shared the skills/information you obtained in the CCMLEST by training other individuals?
6. What are your recommendations for further training for Marine Law Enforcers?

Such monitoring would fold in well with the follow-up WWF/Philippines has already provided DOI regarding the success of this program (see Section II.A and B), in addition to feedback directly from the field on how to adjust the assistance DOI is providing to maximize effectiveness.

2. Coordination

Following the March 2004 law enforcement training, DOI held a debriefing with WWF staff Noel Dumaup, Evangeline B. Micalat, Assistant Ecoregion Coordinator, Joel Palma Assistant Vice President for Field Operations, Dr. Jose Ingles Ecoregion Coordinator and Director of the Sulu-Sulawesi Marine Ecoregion, and President Jose Ma. Lorenzo "Lori" Tan concerning the Sulu-Sulawesi Marine Ecoregion Program. Discussion was held concerning the need for:

- Developing corporate sponsorship;
- Development of a volunteer cadre for completing interpretative and regulatory brochures;
- Trail development;
- Facilities construction and design and instructor needs;
- Development of interpretive underwater trails for snorkeling;
- Training for supervisory and managerial law enforcement personnel via a Law Enforcement for Supervisors training and a Train-the-Trainer program.

3. Curriculum:

In planning for similar trainings in the future, course participants suggested training on, or increasing the amount of time spent on the following topics:

- Actual case studies presented by students from either of the first two DOI law enforcement training sessions;
- Filing cases;
- How to manage illegal fishers who are difficult (e.g. short tempered, tend to start fights with law enforcers);
- Troubleshooting for boat problems;
- First Aid and CPR training;
- Health and safety needs for all water enforcement-conservation officers;
- Rules of the Road;
- Survival Swimming;
- Charting and Plotting

4. Equipment:

The DOI trainers and course participants have identified the following equipment needs:

- Personal Floatation Devices (PFD) issued to all relevant staff;
- Flashlights for boarding and search of vessels;
- Handheld spotlights for enforcement vessels;
- Redlights (red lens for their lights) for night operations;
- Uniforms;
- Identifying marks for all law enforcement and conservation vessels;
- Pocket notepads;
- Cameras for photography;
- Sunglasses of wraparound style with UV and Blueblocker capabilities;
- Raingear (pants and coats);
- Sunscreen of not less than 30 SPF;
- Appropriate non-slip footwear;
- Radios/cell phones on all law enforcement vessels.

In addition, it was recommended that physical fitness standards should be developed and adhered to for incoming employees.

5. Interpreters:

Local interpreters should be provided if participants not fluent in English are to be included in future training sessions.

6. Non-Law Enforcement Related Recommendations:

During it's initial assessment and two training courses, DOI has consolidated the following recommendations, not directly related to law enforcement, but that in conjunction with an effective law enforcement program, could go a long way to

improving the overall protection of the marine protected areas. Technical assistance that DOI can offer would include but not be limited to: Development of kiosk designs and advice on the construction of actual facilities, interpretive signage, interpretive brochures and bulletin boards, community educational and outreach programs and administrative training, in addition to watershed monitoring activities, as described below.

a. **Developing Interpretive Programs:** A range of visitor services are needed, including safe dependable transportation, restaurants, hotels, guides, and vessels appropriate for scuba and snorkeling activities.

- As a first step in identifying what services are needed where, it is recommended that a map be created, if none exist, showing presently utilized ports where commercial and recreational fishing is taking place, locations of marinas offering appropriate services, and locations of hotels and guide services with an overlay showing known illegal commercial fishing areas, drug import areas, or areas associated with the import of other illegal products or persons.
- A plan should be developed for basic services, such as trails, visitor facilities, and camping areas (including camping regulations).
- Interpretive signage and interpretive law enforcement training should be developed for guides and dive boats in this region. Interpretive and regulatory brochures should be developed.
- A model underwater interpretive trail for snorkeling with platforms for novice snorkelers should be developed.
- Guide training should be developed and provided along with a “licensed guide” program.
- A community outreach educational program should be developed for the Ecoregion.
- Public Affairs Officer position description should be written and a volunteer located for the position
- Recommend doing a news briefing to distribute to the local newspapers prior to the training dates (e.g., could take a reporter aboard, train them each day with the students, feed them and house them to give them ownership of the work that is being done.)
- Volunteer Program Development Coordinator position description should be developed and a person located for this unpaid position.

b. **Monitoring of Watershed Area:** All activities alongside the coast have tremendous immediate and/or cumulative effects on marine ecosystems. The following activities would provide valuable information on such impacts, from which well-founded mitigation strategies could be comprehensively designed and implemented.

- Slash and burn agricultural practices have a direct negative impact on water quality and should be monitored.
- Road construction should be closely monitored to ensure proper drainage.
- Run-off should be monitored.

- Marine operations such as fueling and painting, and sewage from residences and motels should be monitored.
- Overlay maps should be developed showing present and new shoreline construction.
- Water quality sampling should be initiated with regular water monitoring.
- A baseline survey of boat traffic should be initiated.
- Consideration should be given to conducting a baseline submerged cultural resources evaluation. The Submerged Cultural Resources Unit of the National Park Service conducts surveys on DOI lands and would be an excellent source for conducting the mapping.
- Abandoned vessels should be documented and removed from the water.
- Photo monitoring should be initiated showing present development and proposed development to allow for monitoring of run off, with monitoring in place to note sedimentation of dive areas or sensitive underwater areas. Any one of these projects can be proposed to Earth Watch, universities or corporations for funding, and any of them would be excellent thesis or college intern projects accomplished with grants or volunteers.

APPENDIX A

Success Story – More Details

Further Information on the 2004 DOI Law Enforcement Training Effectiveness, provided by WWF/Philippines, dated November 3, 2004:

“Newly elected municipal mayor Salve Ocaya recently lead *Task Force Sagip Kalikasan* in apprehending illegal fishers in the waters of Donsol, Sorsogon. Although no arrests were made because of the lack of assistance from the municipal police, the task force proved that it means business in protecting the waters of Donsol.

There have been a lot of speculations on why the municipal police did not fully responded to the request for support from the task force. Actions are already being taken to settle the issue. We were told that Chief of the Philippine National Police Chief Aglipay came over to Legazpi City yesterday to investigate the involvement of PNP personnel with commercial fishing within the municipal waters of Donsol.

For the detailed story please read the news article "Whale Shark Town Seeks GMA Help" on the November 1, 2004 newspaper issue of the Philippine Daily Inquirer or see attachment.

Other Info:

Task Force Sagip Kalikasan was formed last July 9, 2004. On August 9, 2004, an Executive Order was passed which aimed to protect the municipal waters of Donsol and which officially made the task force fully operational. The Executive Order details steps that the local government and the members of the task force will take to stop illegal fishing in the area.

The task force is composed of fishermen, the Municipal Fisheries and Aquatic Resources Management Council (MFARMC), barangay captains, the Philippine National Police, CAFGU, the Media and organizations from Tanggol Kalikasan and WWF.

According to the fishermen from the 11 coastal barangays, illegal fishing vessels, locally known as “*pangulong*” continue to operate in Donsol. These fishing vessels use strong lights known as “superlight” and very fine mesh nets in catching fish. This method of fishing also catches the small fish on which feeds the famous Donsol Whale Shark (*Rhincodon Typus*) or Butanding.

US- DOI-trained, Bernard B ABITRIZ, President of Boat Operators in Donsol and PO2 Roel M Briones Police Investigator are active in the marine enforcement activities in Donsol.

USAID Matching Grants Program is providing funding to support conservation activities in Donsol. Sorsogon.”

APPENDIX B

Budget Breakdown

Dec 1999 Assmt Trip

Wiley travel voucher	4065
Snipes, Christopher- per diem	3920
Total	\$7,985

Mar 2000 Training Trip

Trainee lodging, food, conference room	10445
Wiley travel voucher	5614
Kirwan travel voucher	4463
Subtotal	\$20,521

March 2004 Training & Assmt Trip

West Marine E and B	1701
ShipStore	272
Schaff, William H. -perdiem	4034
Training lodging, food, conference room	5500
Wiley, Carolyn P. – perdiem	4261
Kirwan, Janet A. – perdiem	4072
Subtotal	\$18,139

DOI Management Fee **\$6,250**

TOTAL EXPENSES **\$52,895**

TOTAL BUDGETED \$46,250

MINUS TOTAL EXPENSES - \$52,895

OVERAGE **(\$6,645)**

NOTE: DOI does not charge USAID for the salaries and benefits of the DOI experts while on assignment, and, as such, considers these contributions to the program. For this program, it is estimated that:

DOI contribution total (salaries + benefits) = \$24,300

APPENDIX C

DOI TRAINING CURRICULUM

This Appendix includes only the text of the DOI PowerPoint presentations. The original DOI PowerPoint presentations with photos and graphics were not included within this document due to size constraints. Electronic or hard copies of the original presentations are available upon request.

DOI PowerPoint Training Curriculum:

1. Boat Handling
2. Chart Interpretation
3. Crew Overboard
4. MarlineSpike
5. Marine Patrols Methods
6. Meteorology and Heavy Weather
7. Pursuit, Stop and Approach
8. Terminal Performance Objective

1. Boat Handling

Steering and propulsion

Objectives

List the procedures for safely approaching and leaving a dock

Define static and dynamic forces and how they affect the maneuverability of a vessel.

Describe the fundamentals of single and twin screw theory as applied to small boat

Operation

Identify the differences between inboard, outboard and inboard/outboard boat handling characteristics.

Hull Design

Displacement

Semi Displacement

Non Displacement- hydrofoil, air-cushion

Factors Affecting Boat Handling

Hull Design

Type of propulsion

Horse power

Wind, current and sea state

Horsepower

Type, size and shape of propeller

Side thrust rudder type and force

Frictional wake current and hull friction

Factors Affecting Boat Handling

Cavitation and ventilation
Static and dynamic trim
Weight of boat passengers, cargo, and fuel
Momentum and inertia
Torque effect
Headway and stern way differences
Pivot point and turning radius
Operator's ability and experiences
Operator's familiarity with boat
Wakes, collision, near misses,
Murphy's Law

Hull Shape

Flat
Round
Vee
Cathedral
Multi hull - symmetrical/asymmetrical
Tunnel

Propellers

Rotation
Materials
Blade number
Diameter
Pitch
Cupped
Hub

Cavitation verses Ventilation

Cavitation - low pressure boiling
Ventilation - air drawn from the surface
Surface piercing

Type of propulsion

Directed thrust
Straight shaft

Single Engine Inboard Straight Shaft

Rudder thrust
Rudder centering
Shaft angle
Side thrust
Forward side thrust (to starboard)
Reverse side thrust (to port)

Twin Engine Inboard Straight Shaft

Rudderless handling
Split plant
Cross thrust effect of outside plants
Morse controls point the way

Directed Thrust

Prop shaft angle reduces wheel walk
Twin engine counter rotating
Wheel work before thrust
Cross thrust effect outside motor

Morse controls point the way

Outside influences

Wind
Current
Sea state

Docking

Minimal power
Against current
Against wind
Engine selection
In out
OB's as rudders

Current Keel Effect

Set & drift
Keel bladeing vector force
Station keeping
Split hands!!!!

Pivot Point on Boat

Rear third of the boat
Just forward the motors

Use of Docking/Spring lines

Spring away against wind pin
Fender pivot point
Single loop on cleat
Leave against current

2. Chart Interpretation

Objectives

Identify three types of projections used to develop nautical charts
Identify latitude and longitude & how to use them to determine position
Recognize and interpret the information contained in the title block of nautical chart
Demonstrate converting units of measure on nautical charts
Identify the various nautical publications and uses as aids to navigation
Recognize and interpret the various symbols abbr..s & notes found on charts
Identify the various parts of the compass rose

Graphic of Earth

Nautical Chart

Oldest most used navigational aid
Graphic representation of some portion of the earth's surface
Chart verses map
Maps you look at
Charts you work on to provide a graphic solution to navigational problems
Provides useful information to the mariner (depth of water, known dangers, atons, channels etc.

Longitude

Meridians recent definition

Developed by England = establishment of prime meridian Greenwich England

180 degrees east and west of prime

Always write as three digits

Chart is always orientated North / South

Measurements are on scales on top and bottom of chart

Every 15 degrees of longitude is one hour of time Zulu time

Degree equal to 60 nautical miles ONLY at the equator!!!!

Converge at the pole

Latitude

Parallels or small circles

Only one great circle= the equator

Latitude is the angular measurement to the poles from the equator

One degree = 60 nautical mile

Converting Measurements

One nautical mile = 2000yds for practical purposes on near coastal navigation's

Division of latitude

Degrees, minutes, seconds (NOT TEN BASED adding & subtracting cautions!)

Degrees, minutes, tenths of a minute

Statue miles on strip chart only

Graphic of scale measurements on sides of chart

Examples of reading latitude scale and convert to nautical miles

Nomenclature

Latitude written first

Examples as seconds and tenths of minute

Longitude written second always as three digits

Examples as seconds and tenths of minute

Handout cheat sheet to replace page 9 in handout

Conversion Exercise = Seconds to tenths of minutes and vice versa

Seconds to tenths of minutes

Tenths of minutes to seconds

Yards to tenths of minutes

Yards to seconds

Nautical miles to minutes

Minutes to nautical miles

Courses

Rhumb line route=constant compass course will cause a loxodromic spiral

Great Circle Route=the shortest distance between two points on the surface of the globe.

Graphic of rhumb line vs. Great circle routes.

Ignored for near coastal navigation

Projections of Earth's Surface

Flat plane

Cylinder

Cone

Gnomonic =flat surface accurate only at the point of tangency where the flat touches

One of the oldest forms not very useful for nav.

Distortion out from point of tangency

Graphic

Polyconic Projections

Useful at extreme latitudes

Cylinder/Mercator Projection

Parallels are parallel and 90 degrees to longitude

Can draw a straight rhumb line

Accurate at the equator the line of tangency

Distortion greatest at the poles but scale adjusts for the visual distortion

Scales

Small scale covers a large area

Large scale covers a small area more detail and less distortion

Numeric scale is used on maps e.g. one inch equals 5 miles

Natural scale is used on nautical charts expressed as a ratio or fraction e.g. 1:80,000

Graphic example compares Chesapeake charts 1:200,000 (small) vs. 1:80,000 (large)

Chart Classification & Scales

Sailing-smaller than 1:600,000 offshore sailing

General-1:150,000 to 1:600,000 offshore coastal sailing

Coast-1:50,000 to 1:150,000 inshore coastal and large bays and harbors

Harbor-1:50,000 and larger for harbors and small waterways

Small craft-1:40,000 and larger small craft info e.g. ICW

Chart Accuracy

Only as accurate as the survey on which it is based

Newer surveys more accurate

Older surveys use with caution

Note edition date & use latest edition

Notice to Mariners contains update changes to chart

Dates of Charts

New Editions

Cancels previous editions

Reflect 1 or more important changes

Revision based on notice to Mariners and other sources

Date

Charts Datum's

Basis on which chart is made

NAD83 (north American Datum of 1983)

Different datum's may be up to a 1/4 mile off necessitating a shift of a specific amount to transfer locations from one chart to another

Title Block

GRAPHIC of Chesapeake Title Block

Mercator projection

Line of tangency latitude=distortion from that point.

Datum NAD83 (equal to WGS84)

Soundings in feet (can be shown in feet meter, fathoms)

Vertical datum's= basis from which depth and height is measured e.g.

Tides

Mean sea level average of all highs and lows for 19 years. Two tides a day not the same

Mean low water (MLW) was average of all daily low tides for 19 years.

Mean lower low water (MLLW) -average of the daily lowest low only for 19 years.

Mean High Water and Mean higher high water found the same.

Tidal information block*extreme tidal info

Title Block Nautical Publications

U.S. Coast Pilot-nine vols. Info on regulations, landmarks, Channels, dangers, port facilities, pilotage, etc
Light list- 5 vols. Contain detailed info on all aids to navigation on the U.S.
Notice to Mariners- Weekly, local, broadcast
Tide Tables-four vol. -at locations and times
Tidal Current Tables:two vols.

Coast Pilot

Chart references coast pilot for info that can't be placed on chart
Local notice to mariners lists corrections to coast Pilot
List changes in back of Coast Pilot to keep up to date

Light List

Info on all aids to navigation maintained by the coast guard
Farthest offshore aids first then inward to coast - smaller number
Oriented from north to south
All have own unique number
If position critical will give latitude & long.

Notice to Mariners

Open ocean shipping traffic oriented.
Corrections to Coast pilots, Sailing Directions, Fleet guides, light list etc.

Local Notice to Mariners

Weekly, monthly summary of all weeklies,
Section #1 special notices
Section #2 Discrepancies correction of Discrepancies. For aids to navigation by light list number and name plus private aids if available
Section 3-Chart correction- chart #, edition, name and what the change is various announcements
Section 8- light list corrections

Chart Catalogue

Reference for all available charts from NOAA
Chart Number One
Symbols Abbreviations, and Terms. reference of back labeled alphabetically.
Page 7 sample sheet of page layout & setup
Show graphic

Chart Colors 7 basic colors on NOAA chart

White deep water
Blue= (may be shades of blue)shallower water-decided by cartographer depending on area usage
Green-portions of land covered by tide at times
Buff=dry land
Magenta=used in place of red light to allow red light use at night to attract attention or warning.
Green - buoys
Red-buoys
Yellow-buoys

Depth

Contour lines-demarc depth
Each line represents the same depth along it's length.
At increments of 6'(one fathom) 1, 2, 3, 5, 6, 10, each shown as a unique line one.as listed in chart number
Individual soundings
Show Graphic off smith island shore line
Source Box
The source of information for the chart
Graphic

Reference to other charts

Harbors
Transition to a Harbor?

Two types of Lettering
Vertical not effected by tide
Slanted effected by the tide
Show graphic

Location of objects
Center of black dot on fixed objects
Watch circle used for buoys-they move and are not used for a fix.

Chesapeake Chart

Chesapeake Light

Chesapeake Channel

Cape Charles Lighted Pillar Buoy R 14

CBJ green /red

Chesapeake Bay Junction

Old Point Light Confront

New Point Confront Light

Yellow NCA

North Chesapeake Approach

Wolf Trap Light

Chesapeake Bay Bridge Tunnel trestle channel

Navigational Opening
Compass Rose
Photo Graphic of Compass Rose
Star points to true north- all course on chart shown in TRUE
Inner ring magnetic moves every year(molten mass in earth)
Variation information in inner ring
Headings are listed always as three digits
Graphic of geographic & magnetic pole from observers position on globe illustrating west vrs. East variation.

Plotting Tools
Dividers
Parallel rules
Roller plotter
Protractor (see through plotter)
Nautical slide rule

3. Crew over Board

Man Over Board

Terminal Performance Objective

Given a multiple choice examination, correctly identify the proper procedures for recovering a crew overboard.

Interim Performance Objectives

Identify the proper application and technique for a Destroyer turn.

Identify the proper application and technique for a Williamson turn.

Identify the proper alarms used during a crew overboard situation.

Identify the duties of the lookout (pointer) in a crew overboard situation.

Identify the duties of the pickup crew in a crew overboard situation.

Identify the duties of the boat operator in a crew overboard situation.

Destroyer Turn

Williamson Turn - Used when a crew is discovered missing and not within sight.

Vessel on heading 000 degrees when crew discovered missing.

Helmsman calculates reciprocal at 180 degrees.

Helmsman turns hard to starboard until heading is 060 degrees.

Helmsman then turns hard to port until heading is 180 degrees.

Proper Alarms

SHOUT repeatedly "crew over board" port/starboard side while pointing to the victim.

Sound horn signal: five or more shorts.

Lookout (Pointer) Duties

Continually points to victims location.

Continually keeps victim in sight.

Throws floatable object in direction of the victim.

Duties of the Pickup Crew

Assembles rescue equipment: lines, ladder, hoist, life sling, first aid equip., blanket...

When all prepared sound out "ready on deck."

Retrieves victim upon approach.

Evaluate victim prior to retrieval for possible spinal injuries.

Only as last resort enter water to assist victim.

Duties of the Boat Operator

Executes appropriate maneuver.

Activates any available electronic position fix.

Sounds 5 or more short blasts.

Announces over VHF 16 "Pahn Pahn Pahn" vessel, location and situation.

Duties of the Boat Operator On Approaching the Victim

Approach from down wind/current.

Keep boat 10' to 15' from victim.

Place vessel in neutral upon losing sight of victim.

NEVER back toward victim.

Remember ...your blind spots.

Solo Boat Operation

Prevention

Equip vessel for self recovery

Kill switch

Practice self recovery

Interim Performance Objectives

Identify the proper application and technique for a Destroyer turn.

Identify the proper application and technique for a Williamson turn.

Identify the proper alarms used during a crew overboard situation.
Identify the duties of the lookout (pointer) in a crew overboard situation.
Identify the duties of the pickup crew in a crew overboard situation.
Identify the duties of the boat operator in a crew overboard situation.

Remember

The leading cause of crew overboard...

4. MarlineSpike

Terminal Performance Objective

The student will demonstrate the fundamentals of Marlinespike as delineated in this course by application in practical exercises and written examinations.

Interim Performance Objectives

Identify the different types and characteristics of line, its usage on vessels, and common reference terms.
Identify the proper procedures for securing and heaving lines.
Identify the procedures and equipment characteristics, terms and procedures used in anchoring a vessel.
Identify various knots, their uses in the marine environment, and the strong and weak points of each.
Demonstrate the ability to tie the specific knots covered in this course.

Types of Line

Manila (natural fibers)
Synthetics
Wire rope

Line Care

Store dry ready coiled
Inspect after stress/chafe/strand breakage
Overstressing weakens line
Dirt/salt breaks micro fibers
Periodic wash (softener)

Anchors and Anchoring two primary purposes

To park the boat-observations, static placement
Safety- power loss, kedge, severe weather

Types of Anchors

Yachtsman or Keg
Mushroom
Grapnel
Plow
Danforth
Drogue = towed astern under power
Sea anchor = set from bow adrift

Drogues

Anchoring Factors for Site Selection
Weather
Ground tackle
Bottom type
Bottom contour
Tide range & movement
Geographic hazards

Deploying the Anchor

Determine length of rode
Prepare rode:fake/figure eight
Secure bitter end
Station boat
Lower anchor as vessel drifts back
Verify set with power

Scope - length of anchor rode

Water depth
Tide rise
Height of cleat

Common Scopes

Five to one: lunch hook
Seven to one: overnight
Ten to one: heavy weather

Required Knots

Figure Eight
Sheet Bend
Double Sheet Bend
Strait Bend
Bowline
Anchor Hitch
Cleat Hitch
Clove Hitch

Figure Eight

Sheet Bend
Double Sheet Bend
Strait Bend
Bowline
Anchor Hitch
Cleat Hitch
Clove Hitch
Now Go Practice!

5. Marine Patrol Methods

1. Identify the types of vessels and propulsion systems appropriate for marine law enforcement applications.
2. List the planning considerations for marine patrol activities.
3. Describe and demonstrate the various patrol tactics available to marine patrol units.
4. Formulate a marine security plan for regattas, races, shore side activities, and VIP security.

MARINE ENFORCEMENT VESSELS

Trailerable boats allow flexibility.
Outboard engines most suitable for trailer applications.
Hull Designs-
Flat bottoms
Cathedral hulls
Vee's- semi and deep vee
Oddities

PLANNING PATROL ACTIVITIES

Nothing-NOTHING-beats local knowledge
Marine patrol requires officer flexibility

MARINE UNIT PATROL OBJECTIVES

Routine patrol equals crime deterrence.
Community Service
VIP/special event security
Property loss prevention/recovery
Enforcing applicable waterway regulations
Environmental/resource protection duties.

MARKED VESSELS

By CFR regs, NPS patrol vessels are marked similarly to USCG vessels.
Marked vessels can provide a deterrence in themselves

PROACTIVE VS. REACTIVE PATROLS

Proactive Patrols
-Aggressive patrol to detect/deter violations
Highly visible
Deter/reduce violations
Increased contacts
---BUT---
High cost
May result in increased complaints if abused

Reactive Patrols
Complaint/problem generated response
Low cost, manpower effective
---BUT---
Ineffective deterrence

DIRECTED PATROLS

Use intelligence/experience to effectively plan patrol efforts
May vary with seasons, special events, weather, etc.

RANDOM PATROLS

Yield random results
Expensive
---BUT---
May reveal surprising trends
Best time for area familiarization
Violators plan around your 'schedule'

SELECTIVE ENFORCEMENT

Target high use/violation areas
May target specific problems; i.e., BUI, poaching, personal watercraft, etc.

WATER PATROL

Routine patrol
Marked units with uniformed officers
May be scheduled
Emphasizes numerous public service contacts
Intelligence can be gathered from visitors, marinas, restaurants, boaters, other officers
Altering patrol patterns can increase effectiveness
J.D.L.R.'s

SURVEILLANCE

(The fun part of marine patrol!)

More difficult than surveillance on land
Vessels should blend
-color
-type
-activity
Countersurveillance
Patrol vessels or tow vehicles in normal location?
Violator movement to “draw you out?”
False reports
Scanners
Observing officer’s homes/stations and movements

MOVING SURVEILLANCE

Appropriate distance
Mimic ‘local’ movements
Running blackout!!!!!!!!!!!!!!!!!!!!
-YOU ARE LIABLE!
Running with lights-varying movement
Displacement speed
Wakes

MOVING SURVEILLANCE

Foam trail
Wash on banks, roots, pilings, etc.
Discolored water
Broken fringe ice/vegetation
Sounds
Setting trail indicators

STATIONARY SURVEILLANCE

Mimic ‘local’ activity
Concealment
-Shoreline
-Lee of wind
-Eastern banks at sun up
-Break your silhouette
-Sound travelling on the water

ELECTRONIC SURVEILLANCE

Radar
-\$1500 Buys good LCD unit
-‘Guard zones’
-Permits navigation in low/zero visibility
-‘IR Rejection’ detects other radar in area

6. Meteorology and Heavy Weather

Reading Assignments, Chapman Piloting, 62nd Ed., Chapter 11 pages 240-247
& Chapter 14 pages 296-327

Interim Performance Objectives

Identify sources of weather information

Identify conditions associated with marine weather advisories.
Identify the components and identifiers of various weather systems
Identify recommended safety equipment and its use during heavy weather operations.
Describe safety procedures used during heavy weather operations.

Weather Information Sources

Commercial radio stations, television, and newspapers.
Reports from the National Weather Service
Internet link to weather buoys & ship reports
Satellite imagery
Doppler Radar
Commercial weather services

VHF Marine Weather Broadcasts

WX 1-9 by Coast Guard
Usually updated every three to six hours
Severe weather bulletins are issued on VHF marine channel d22a - following a "securite" notice on channel 16.

Marine Weather Advisories

Small Craft Advisory:
Gale Warning
Storm or Whole Gale Warning
Hurricane warning

Small Craft Advisory (small boats, yachts, tugs barges with little freeboard or other low powered craft)

Winds as high as 33kts. Exist or forecast
Waves up to 15' with rough sea state

Gale Warning

Winds of 34-47 kts.
Waves up to 25' with high sea state

Storm Warning or Whole Gale Warning

Winds of 48 kts.
winds of up to 63 kts. If associated with a hurricane
Waves of up to 40' very high sea state

Hurricane Warning

Winds of 64 kts. and above
Waves of 45' or more with phenomenal sea state

Weather System Components

Barometric pressure: high and low
Dew point/relative humidity
Warm fronts
Cold fronts

Components of Weather Systems

Barometric Pressure

Measure in inches or millibars
29.92 Inches or 1013.2 millibars is mid pressure standard
Pressure gradients control wind velocity
High and low pressure air masses

Low Pressure Systems

Falling pressure
Rotate counter clockwise in Northern hemisphere

Generally bad or unsettled weather
Higher winds
Buys-Ballot Law

High Pressure Systems

Raising pressure
Rotate clock wise in Northern Hemisphere
Generally bring fair weather (less clouds and precipitation than a low)
Winds generally weaker than lows

Fronts

Cold Front

Unstable conditions strong gusty winds
Pressure falls, faster the the more intense
Moves 300 -500 statute miles per day
Clouds lower and build rain starts slowly but increases rapidly
Can produce squall lines
Move eastward to s/e-ward
After passage, temperature drops pressure builds and wind veers to northeast

Warm Front

Milder than cold fronts with weaker steadier winds
Buildup of clouds w/ drizzle or rain
Slowly falling pressure
Moves 150 - 200 statute miles per day
After passage temperature and pressure rises(slower than a cold front)

Mares Tails Fair Weather

Cirrocumulus Thickening
Storm to Come
Cumulonimbus Base
Cumulonimbus Base with squall line
Micro Burst
Serious Cloud
Lighting

Lighting Protection

Avoidance: monitor storm directions & speed of approach
Faraday cage
Stay away from metal

Fog

Saturation: the point at which the air would not absorb moisture.
Warm Air holds more moisture than cold.
Relative Humidity: actual water in the air as a percentage of the saturation point at the same temperature and pressure.
Dew point: temperature at which the air would be saturated if cooled at constant pressure.
Fog begins to form when Dew Point and Temperature come within 2 degrees

Waves

Waves = Energy
Wind strength
Wind duration
Wind fetch (distance over water which the wind blows)
Waves come off the wind at a 30 degree angle to it's direction

Wave Definition

Height:swell, average, significant, rogue.
Frequency
Steep-ness is what counts.

Significant Wave Height

Average of the highest third of all waves
15% Of all waves will equal or exceed the SWH
10% Will be 25% to 30% higher then the SWH
Mean 65% of SWH
Approx. one every hour twice the SWH

Drogues

7. Pursuit, Stop & Approach

Presented by the Marine Training Branch Federal Law Enforcement Training Center

Objectives

Demonstrate safe and effective procedures of vessel operation in a pursuit situation.
Identify and demonstrate appropriate and effective techniques used to stop a vessel.
Identify procedures for approaching a suspect vessel safely and without damage to either vessel.
The student will identify the duties and responsibilities of the vessel operator and crew during a vessel stop.

Pursuit

Pursuit, as defined by Webster's Dictionary is "to follow in an effort to capture or overtake".

Categories of pursuits.

Non-hostile or non-aggressive.

Aggressive or hostile (most dangerous).

Non-hostile pursuit

Even if no hostility is perceived, all pursuits must be viewed as a "tactical evolution".

NEVER VIEW ANY BOARDING AS "ROUTINE", until it is completed.

Contributing factors for a MEO are wind, precipitation, sea conditions, motor noise, etc. These all affect the officer while underway.

Non-hostile pursuit

Outside wind and engine noise are not only a problem for you, but also for the suspect.

Non-hostile pursuits will be of short duration.

What begins as non-hostile can quickly become hostile. BE PREPARED

Avoid Tunnel Vision at all costs.

Hostile Pursuits

Be able to distinguish between intended or unintended actions by a suspect.

Examples of intended actions

Rapid change of course/speed when you are observed.

You observe weapons on board.

Contraband being jettisoned.

Suspects more interested in you than normal.

Obvious disregard for blue light/siren/hailer.

Always Remember

The average national marine unit backup time is.....

THE 80% RULE

WHY PRACTICE IT?

The 80% Rule

Never exceed 80% of the vessel's or your capabilities when pursuing.

Have the remaining 20% as a back-up.

The suspect will normally be operating at 100% of the vessel's and their capabilities.

There will always exist the possibility of mechanical or physical failure on either vessel which would require immediate action on your part to avoid an accident or injuries.

The 80% Rule

Adrenaline Flow - USE IT

It will sharpen your senses.

The "Heat of the Chase"

Learn to control .

Weigh the consequences.

Constantly scan 360° at all times. Both the operator and crew.

Avoid Tunnel Vision at all costs.

Examples of Tunnel Vision

Pre-patrol preparations

Know the capabilities of yourself and your vessel.

Know your crew and their state of readiness. (mentally and physically)

Stow all gear prior to getting underway.

Have proper safety and emergency equipment and ensure it is operational.

Perform a pre-flight check of the vessel every time before getting underway.

Pre-flight "A" Check

VESSEL PURSUIT OPERATION

Hull Design

VESSEL PURSUIT OPERATION

Propulsion Systems

VESSEL PURSUIT OPERATION

Proper use of Trims and Drives

LIMITATIONS TO CONSIDER

Weather and Sea Conditions

Your own Ability

Vessel Familiarization

Decision Making Ability (psychological)

Wellness (physical)

Reaction Time (Are you a mind reader?)

Vessel Limitations

Dangers to Avoid

The "Stuff"

The "Blow Over"

The "Corkscrew"

The "Transom Crush"

Pursuit Skills

Observe the operator as much as possible.

Watch the spray pattern coming off of the suspect vessel.

Watch the attitude of the suspect's hull and lower unit(s).

Know the controls of your vessel by heart.
Constantly scan 360°.

Reaction Times

You can NEVER overcome this.

ALWAYS, ONE HAND ON THE WHEEL AND ONE HAND ON THE THROTTLES.

Always allow enough distance between your vessel and the suspect's, considering the reaction time distance.
Stay behind and slightly offset to give yourself an "out".

Bad Guy

Prior to Approach

GET CONTROL OF YOURSELF.

ID yourself using voice, PA or radio.

Direct the captain to do what you want.

Do not give any extra information.

"Prepare to be boarded."

Boarding team remains behind cover until touchdown.

Pursuit, Stop & Approach

Objectives Review

Demonstrate safe and effective procedures of vessel operation in a pursuit situation.

Identify and demonstrate appropriate and effective techniques used to stop a vessel.

Identify procedures for approaching a suspect vessel safely and without damage to either vessel.

The student will identify the duties and responsibilities of the vessel operator and crew during a vessel stop.

Questions and/or Comments??

8. Terminal Performance Objective

The student will identify and demonstrate the recommended procedures for seizing a vessel, arresting persons on board, preserving evidence and maintaining a chain of custody according to the principles delineated during the course of instruction

Interim Performance Objectives

Demonstrate proper techniques used to control suspects during an enforcement boarding.

Demonstrate the safe and effective method used to place a suspect under arrest in the marine environment.

Demonstrate the proper techniques used to properly search and handcuff a suspect in the marine environment.

Arrest Decision

Environmental factors; wind, wave, Temperature?

Solo Officer

Backup Availability?

Arrest alternatives

Issue citation with later arrest

Arrest at safer location

Until backup arrives

Controlling Suspects

Pre-plan tactical approach

Multiple officers brief team

Pre-arrange code word(s)

Arrest Tactics

Control as much as possible from your vessel
Remember to control hands.
Place all persons in a position and location of greatest disadvantage .
Gather as much info possible prior to boarding
Hat off to board...tee top headache!
Practice weapon control and overboard drills

Hi-Risk Arrest

Verbal commands clear, simple and able to be complied to.
Place persons in an outboard position away from you
Hands controlled...on head, grab rail, gunnel, etc.
Cuff then search.
If possible have person back up to and sit on the gunnel to be cuffed from your boat

Cuff then Search

Practice cuffing on a pitching boat
Kneeling or prone searches best if movement
PFDs required for cuffed persons...Type II yoke style convenient

Vessel Search/Safety Security Sweep

Must search to assure sea worthy safe condition.
Assure no hidden persons
Inspect registration documents

Boat Disposition

Arrest person operate...?
You are responsible
Competent passenger operate
Sea tow
Second officer
You tow

Summary

Decision to make custodial arrest
Preplanning/briefing
Proper approach
Arrest tactics
Proper prisoner control and handcuffing
Seizure of vessel options