

LT CHRISTIAN'S LITTLE BLUE BOOK

AN UNOFFICIAL GUIDE FOR US NAVY
SHIPBOARD MEDICAL OFFICERS

Original Edition: 1984

by

CAPT M. L. COWAN, MC, USN

and

LT GENE CHRISTIAN, MC, USN

1984

Second Edition: 1992

Revised by

LCDR ANN P. FALLON, MC, USN

Navy Environmental Health Center

Third Edition: 1999

Revised by

LT PAUL JEFFREY BRADY, MC, USNR

USS CORONADO (AGF-11)

and

LCDR ERIC RASMUSSEN, MC, USN

Fleet Surgeon, THIRD Fleet

for the

SURFACE WARFARE MEDICINE INSTITUTE

SAN DIEGO, CALIFORNIA

detachment of the

NAVAL OPERATIONAL MEDICINE INSTITUTE

PENSACOLA, FLORIDA

Please send feedback, suggestions, and any other correspondence to:

CAPT Jeffrey M. Young, MC, USNR
Officer-in-Charge
Surface Warfare Medicine Institute
Building 500, Room 114
140 Sylvester Road
Naval Submarine Base
San Diego CA 92106-3521
(619) 553-0097
email: jmyoung@nmcsd.med.navy.mil

TABLE OF CONTENTS

Preface to the Third Edition	7
Forward to Second Edition	8
Preface to Second Edition	9
Forward to Original Edition	10
Preface to Original Edition	11
Introduction	13
Chapter 1, Naval Etiquette	17
The Quarterdeck.....	17
The Wardroom.....	18
The Bridge.....	19
Chapter 2, Helpful Hints of General Interest	21
Chapter 3, Naval Correspondence	23
Message Traffic.....	23
Sample Message.....	26
Radio Communications.....	27
Chapter 4, Shipboard Organization	29
Department Head.....	29
Division Officer.....	30
Deck.....	31
Weapons.....	32
Operations.....	32
Engineering.....	32
Air.....	33
Navigation.....	33
Supply.....	33
Admin.....	34
Communications.....	35
Repair.....	35
Medical/Dental.....	36
Chapter 5, Departmental Administrative Management	39
Chain of Command.....	40
Confidentiality.....	42
Other Leadership Issues.....	42
Chapter 6, Naval Officership	45
Command Relationships.....	45
Total Quality Leadership.....	46

Fraternization.....	51
Good Order and Discipline	51
Chapter 7, Medical Officer Responsibilities	53
Medical Guardship.....	53
Physical Examinations.....	53
Laundry/Mess Specialist/Barbers/Food Service Assistant Physicals	55
Brig and Correctional Custody Unit Physicals	56
Fitness for Duty Exams	57
Overseas Screen	58
Medical Practice	58
Sick Call.....	60
Medical Records.....	61
Dental Records.....	62
Narcotics and Prescription Writing	62
Prescribing Medical Treatment.....	64
Intravenous Therapy	65
Non-Medicinal Treatment	65
Laboratory	66
X-rays	67
Operating Rooms	68
Ward Patient Care	68
Referrals.....	69
Appointments.....	70
MEDEVAC.....	70
Quality Assurance	72
Watchbills	73
Chapter 8, Training.....	75
Yourself	75
Shipboard Qualifications.....	76
Enlisted Surface Warfare Specialist (ESWS)	77
Shipboard Training Programs.....	77
Indoctrination of New Personnel.....	77
All Hands Medical Training.....	78
Specialty Training	80
Corpsmen In-Service Training.....	81
Other HM Requirements.....	83
HM Advancement	84
Strikers	84
PQS Boards.....	85
Chapter 9, Navy Programs	87
Alcohol and Drug Abuse.....	87
Physical Fitness and Weight Control.....	89
Women at Sea.....	90
Chapter 10, Additional Administrative Responsibilities.....	95
The Supply System	95
AMMAL.....	95
Operating Target (OPTAR).....	96

Supply.....	97
Open Purchase.....	98
Routine Supplies	99
Defective Supplies	99
SAC 207 Account	100
Narcotics.....	100
Medical Equipment Purchases	101
Emergency Equipment and Supplies	101
Contingency Supplies	102
Maintenance and Repair (3M PMS)	103
Medical 3M	106
Fire Station Maintenance (Damage Control)	106
Chapter 11, Administrative versus Battle Organization	109
Nuclear, Biological, Chemical Defense	110
Battle Dressing Stations	111
Mass Casualty	112
Chapter 12, Inspections	115
Medical Readiness Assessment (MRA)	115
Inspection and Survey Aboard (INSURV)	116
Operational Propulsion Plant Examination (OPPE).....	116
RCPE/ORSE – Radiological Controls Practice Examination and Operational Reactor Safeguards Examination.....	117
Nuclear Weapons Acceptance Inspection.....	117
Inspections You Perform	118
General Cleanliness	118
Zone Inspections	119
Personnel Inspections	120
Health and Sanitation Inspections	121
Galley Inspections	123
Disease Outbreak Investigation.....	126
Berthing Inspections	127
Head Sanitation	128
Barber Shop	128
Ship’s Laundry.....	129
Dry Cleaning Plant.....	130
Coffee Mess	130
Ship’s Store and Fountain	130
Rats	131
Cockroaches.....	132
CHT Pump Room and Sewage Spills.....	132
Potable Water.....	133
Chapter 13, Reports	135
Tickler System	135
Internal Reports	135
External Reports.....	136

Chapter 14, Preventive Medicine	139
Immunizations	139
Sexually Transmitted Diseases	140
HIV Program	141
Malaria	141
PPD and Tuberculosis Control Programs	142
Chapter 15, Occupational Health Programs	143
Radiation Health Program	143
Hearing Conservation	144
Asbestos Program	147
Mercury Control	149
Lead Control	149
Halogenated Hydrocarbons	150
Otto Fuel 11 Program	151
Heat Stress	151
Chapter 16, Safety Programs	155
General Safety Items	155
Eye Protection	156
Respiratory Protection	156
Protective Clothing	157
Welding Areas and HT shop	158
Battery Shop	159
Machine Shop	159
General Surface Maintenance	160
Electrical Safety	160
CHT Pump Rooms	160
Oxidizing Materials	161
Safety in Medical Spaces	162
Accident and Injury Reports	163
Chapter 17, Sanitation Programs	165
Garbage and Refuse	165
Biomedical Waste	166
Hazardous Waste	166
Chapter 18, Deployment	169
Refresher Training (REFTRA)	169
Predeployment Schedule	169
Embarked Medical Personnel	170
Medical Intelligence	171
Appendix A, Phonetic Alphabet	173
Appendix B, Ship and Boat Types	175
Appendix C, Common Acronyms	177
Appendix D, Predeployment Check List	183
Appendix E, Sources of Medical Intelligence	185

PREFACE TO THE THIRD EDITION

As I write this preface at sea in the North Pacific, I recognize how impressed and grateful I remain from my first exposure to the original edition of this volume. That pleasure resurfaced as I looked at this book again with LT Brady, working together to preserve the character and flavor of both LT Christian's original work and LCDR Fallon's strong enhancement.

It is, therefore, rewarding now to release this third edition. It is important to get the book back out into the waterfront where it belongs, and, to the credit of the earlier authors, much has remained the same. We take no credit for originality; the expansion has been mild, the details have been brought up to date, and the flow of the book is essentially unchanged. We worked only to help the content reflect our Navy moving toward a new millennium. We otherwise liked the book very much just as it stood.

Although some aspects of shipboard medical life are perennial, what is not so easily seen within these pages is the improved communication capability aboard ship that makes shipboard care so much more effective. Store-and-forward email, digital imagery from inexpensive cameras, standard medical textbooks on CD-ROM, and standardized reporting templates on the World Wide Web have done much to help shipboard providers take care of their crews.

That technology has its valued place, but that place is well circumscribed. Of greater importance are the mind and heart required to deliver competent, compassionate care in a remote and hazardous location. The repeated emphasis on initiative, leadership, training, and responsibility runs as a silver thread through this book, and cultivation of those qualities will do more to heal the hurt and sick than any electronic aid.

Shipboard care delivery is, without a doubt, challenging. It is perhaps made more so by the frequent perception that we care more about the major hospitals than we do about the operational providers. That emphasis is shifting, and I hope that the delivery of medical care within the operational forces, Blue and Green, will continue to increase as the focus of the Navy Medical Corps. In addition, RADM Higgins, in the forward to the second edition, encourages the development of a career path in operational medicine.

To further both these aims, the Surface Warfare Medicine Institute has been established, dedicated to preparing medical personnel to meet the needs of sailors and Marines afloat. Those men and women at sea are the reason for our existence as a Medical Corps. They are our first and foremost responsibility, and we serve in their support.

This fine little book, with advice from those who serve at sea, can help your transition onto our gray hulls. We welcome you aboard and wish for you a richly satisfying tour.

ERIC RASMUSSEN, MD, FACP
Lieutenant Commander, Medical Corps
United States Navy
Fleet Surgeon, THIRD Fleet
July 1998

FOREWORD TO SECOND EDITION

It is a distinct pleasure to address you in this “down-to-earth survival manual” as you begin your first operational tour as a Navy physician. Please read Admiral McDermott’s Foreword to the original edition in which he elegantly explains why this book was written. I would like to elaborate on this theme to include careers in the exciting world of operational medicine.

Your enjoyment of fleet medicine does not have to be a one-time opportunity. Why not repeat the adventure after your residency? Operational tours can be alternated with assignments to MTFs/Clinics to produce a truly challenging and rewarding career pathway. Additionally, operationally focused careers can be built from tours as senior Medical Officers aboard ship, group Medical Officers, fleet staff, medical type commanders, and fleet medical advisors. You will seldom hear about these opportunities in hospital settings but this career path can be just as rewarding as hospital-based duty. This book goes into its second edition thanks to the enterprising skills of a young Medical Officer, LCDR Ann Fallon. LCDR Fallon is part of a new breed of physicians who have decided to specialize in “Fleet Medicine.”

This revised shipboard book was a MPH project for her preventive medicine residency at the Uniformed Services University of the Health Sciences. Prior to her residency she served 3 years aboard a tender. These experiences resulted in the revisions and updates to this sought-after and hoarded book, first compiled by CAPT Mike Cowan and LT Gene Christian in 1984. As your assignment in the operational environment unfolds, I encourage you to be sensitive to the unique challenges this assignment will present—challenges clearly different from civilian medical practice. You will quickly realize that you are responsible for not just providing medical care, but also for managing a health care system, providing leadership to a department, and offering medical advice to our line colleagues. Use the information contained in this book to assist in the performance of your multiple duties, and welcome to the world of operational medicine.

This professional experience will test your mettle as a physician, leader, and manager. You can handle the challenge; this is the true essence of Navy Medicine. Good luck and my very best wishes for an exciting and professionally rewarding experience.

ROBERT W. HIGGINS
Rear Admiral, Medical Corps, United States Navy
Chief, Medical Corps

PREFACE TO SECOND EDITION

This book is an unofficial guide intended to complement the GMO Manual NAVMED P-5134. It is written for the GMO who will be going to sea or assigned to surface ship staffs and addresses the unique aspects of surface medicine. It is intended to take some of the mystery and anxiety out of the new and unknown environment. This book does not have all the answers, but merely some solutions that have worked for others before you. It is a tool that is to be used in conjunction with our Type Commanders' instructions and other Navy instructions.

This author would like to thank CAPT Cunnion, CAPT Yang, and LT Rebholz for their technical and editorial assistance, LT Christian and CAPT Cowan for their fine original edition, as well as everyone who reviewed the draft edition and submitted much appreciated comments. The sea is a demanding environment and exacts a toll on all that face her. However, nothing can be more rewarding than the satisfaction of doing your part in support of the mission and meeting that challenge head on. Those of us who have been to sea know the unique challenges that you face and are there to help you in any way we can.

The Navy Preventive Medicine and Occupational Health Department is one such group. It is with their assistance that this new edition of the shipboard medical guide is being published. Preventive Medicine Officers know that one outbreak of disease can destroy both the health and morale of any fine crew very quickly. Attention to detail and common sense can avert many a disaster. Remember that help is just a phone call or a message away....

Good luck and may you have fair winds and following seas.

LCDR Ann P. Fallon, MC, USN
December 1991

FOREWORD TO ORIGINAL EDITION

As it should have been, this book was born at sea—in my cabin aboard a Navy ship underway in the Caribbean. The impetus to its birth was the many discussions with the authors regarding the need for a compendium of shipboard life and medical practice for use by those of our junior Medical Department officers fortunate enough to be detailed to a ship of the fleet.

Within a short time, most of you reading this book will be going over the “brow” of a Navy vessel to begin an experience in what will be one of the most complex and challenging environments imaginable. But an environment that, if you meet it halfway, will provide more satisfaction than any in which you will ever live or work.

For some of you the mission of the Navy at sea will come as a new and perhaps harsh reality. For the first time many of you will be practicing medicine within a command whose mission is not health care but rather to fight at sea and whose first responsibility is the preservation and safety of the ship and the men and women in her. As you better understand this concept, you will become increasingly more comfortable with your role as a member of a team whose skills comprise a multitude of disciplines, each as sophisticated as yours. For the most part, your teammates will be working in an environment with which they are completely familiar from long years of training and experience. For you it will be new, and for that reason, learn from them in order to better perform your job.

Your lack of experience is what makes this book so valuable. Our authors, Captain Cowan and Lieutenant Christian, have caught the spirit of medicine at sea. In the months ahead you will find that almost every possible circumstance you will experience has been described or mentioned here. This book should be the foundation on which to base your own growth and experience. With this beginning, your experience as naval officers with our fleet will be a part of your career that will be remembered forever.

W. M. McDERMOTT, JR.
Rear Admiral, Medical Corps, United States Navy
Commander, Naval Medical Command
September, 1984

PREFACE TO ORIGINAL EDITION

Congratulations on your assignment to the USS NEVERDOCK (or her sister ship of the fleet). If you are not ship-bound and only picked up this book accidentally, put it down. There is nothing here of much interest to you. If you are ship-bound, read on; the two years ahead hold many surprises in the work environment, relationships to others, and the scenery (unless you are aboard a submarine). All will be drastically different from hospital ward life. This book relates the experiences of a few who have undergone this transition before you and is designed to help make your assignment easier and more enjoyable.

Many physicians have expressed, in one manner or another, that they would rather have sharp things stuck in their eye than take a year or two out of their training to float around on LGBs (Large Gray Boats). Others are happy for the time off to gather themselves, pick a specialty, or just have the chance to occasionally be outside when the sun is shining. Whatever your feelings about shipboard medicine, you can have it anyway you wish; it can be miserable, unrewarding, and boring, or it can challenge you thoroughly while giving you a look at a world few people see. But regardless of your feelings towards being on a ship, you are there and in charge now. Your people will look to you for guidance and support. Don't let any negative feelings that you have come across to them, or their morale will suffer. Most of them did not ask to be on a ship either. But by looking on the bright side (there is one), this will be two years like none you have ever had before. Nowhere is the old saying truer; you get back what you put in.

A tour of duty with the line is key to the development of a Navy Medicine career. Without the perspective of those we serve, a military physician will always be myopic in approaching active duty patients and will not likely get much satisfaction from the time spent in this service.

You will find the line to be extremely open and receptive to your efforts. Most physicians have been amazed at the helpfulness and appreciation shown to them by the officers and sailors of the fleet. If you no more than do your job adequately, you will be considered the best thing since sliced bread. ANY extra effort on your part will be greeted with the same enthusiasm as if you showed someone how to walk on water.

Generations of physicians rotating through the line have almost universally had the same experience. This response is not because the previous doc was a foul ball and you only look good by comparison. The enthusiastic reception the Medical Corps receives from the line is so consistent; there just aren't enough bad performers around to set everyone up to be a hero.

It must have more to do with the importance placed by the line on our involvement with their operations. Perhaps they are in a better position to see the positive impact on morale, ship's function, and effective operations that can be engendered by an enthusiastic and efficient Medical Officer. Just being the "doc" gives all of us a great big leg up in the shipboard community. Remember, too, those who follow behind you depend on the legacy you leave.

Take time to brush up on military customs if you can. The line community operates differently from the hospital. A few hours with the ARMED FORCES OFFICER, despite

its turgid prose, the NAVAL OFFICER'S GUIDE, the WATCH OFFICER'S GUIDE, and the DIVISION OFFICER'S GUIDE are very worthwhile. NAVAL CEREMONIES, CUSTOMS AND TRADITIONS, THE BLUEJACKET'S MANUAL, and NAVAL TERMS AND ABBREVIATIONS are also good references for learning about and understanding your new environment.

If you have never been in a line military environment, you are certain to make social blunders—there is a very rigid code of behavior. Bear it with good humor—staff corps officers, and especially Medical Corps officers, are considered “fair game”. The other officers have been looking forward to your arrival so they can “gig” the new doc. Even if you have spent time boning up on military courtesies, they are pros and will get you. ALWAYS REMEMBER; Be patient. You will have your chance to join the fun when you become one of the “old pros”—newcomers are always in ample supply.

In addition to general military courtesies, there are some specifics to shipboard survival. Below are some general helpful hints that will enable one to make the transition from shore to ship a little less intimidating.

INTRODUCTION

Planning for shipboard existence should begin immediately upon receipt of orders. You will need as much advance information as you can get, with enough time to make preparations. The best way to start is to write a letter to the Commanding Officer (CO) of the ship to which you are assigned. The *Guide to Naval Writing—A Practical Manual* gives examples. (See Naval Correspondence.)

This letter should identify you to the Captain as a future shipmate. Include a thumbnail, with your education, interests, and plans. A letter is a signal that you are, indeed, a living, warm body with an interest in the ship. Since such a letter is also standard operating procedure among line officers, it gives your CO a strong indication that you have, at least, some clue as to what's happening. You should also send the same type of letter to the person you are relieving. It will greatly "relieve" their mind to know that you exist. A call or a visit would also be welcome.

Ships' movements are classified. It may be difficult, but you will need to determine a reporting day; the Executive Officer (XO) can give you the best guidance in assigning a date. The XO is also an invaluable source of information about everything you will need from uniforms to operational plans and may also have information regarding your ship's movement that cannot be conveyed through regular communication channels. You must remain flexible about the time you report aboard. Ship's schedules change on a moment's notice due to operational contingencies; perhaps one of the most forlorn feelings in the Navy is to be standing at the dock watching the exhaust smoke of your ship disappear over the horizon. If you are in the reasonable geographic vicinity of the ship, either home port or on operations, take the time to visit (scheduled if possible) some afternoon. More can be accomplished personally in an hour than with a pound of letters. It's worth investing the time.

The XO or your designated sponsor can provide information helpful in getting your uniform requirements together. Basic working uniform for officers aboard ship is working khaki. Most physicians coming out of their internship don't own any, so go shopping. With the XO's knowledge of planned deployments of the ship, you can learn what heavy weather gear you need.

US Navy Uniform Regulation (NAVPERS 15665 paragraph 3101 states that: "Officers and Chief Petty Officers are responsible for buying and maintaining uniforms appropriate to their assigned duties and as required by their prescribing authority. There is no minimum number of uniforms required to be in their possession. Sufficient quantities of uniform items shall be procured and maintained to ensure high standards of personal hygiene and appearance...." You are supposed to have a full seabag. (See Naval Officer's Guide or the Uniform Regulations for guidance on what your seabag should contain.) The faster yours is filled, the fewer opportunities will arise for you to be embarrassed by lacking a required item (this always occurs on deployment to some far corner of the world, never less than 2,000 miles from a uniform shop). For women this is particularly vital, since the Navy still has a somewhat poor supply of women's uniforms overseas (and even in many CONUS exchanges). The Navy Uniform Support Center in Norfolk is a great way to order by phone (1-800-368-4089).

Ship schedules are unpredictable. The wise sailor is ready for all contingencies. Ships can be diverted from their original mission to an entirely different area of operations with different weather and uniform requirements. People who dress for a particular trip on schedule may be caught short. If there is any chance you will need it, take it, since Murphy's Law guarantees you will need it when you won't be able to get it.

A MINIMUM seabag should contain three changes of all uniforms: khakis (CNT and cotton, short and long sleeves), summer whites, and winter blues, in addition to service dress blues and whites and special uniforms as recommended. Women are required to have the pants and skirts for all uniforms including the dress uniforms, even though skirts and pumps are not worn aboard ships for obvious safety reasons. If your ship is to be making courtesy calls through the Mediterranean or Caribbean, you may need a variety of dress uniforms up to and including a sword (women too). LTs and below do not have to have Mess Dress or swords unless the Command so directs. Check ahead; the CO is the boss and makes the rules. If you have medals, make sure you have both the large and the miniature ones for any ceremonies that may require them. Ribbons only go on CNT-type khaki. Warfare pins go on all khaki.

Above all, do not skimp on working uniforms. Ships' laundries can be notoriously slow or inadvertently destructive, especially when you need them most. Your only change may be in the laundry when a sudden roll spills your breakfast on your lap, or a seasick sailor ruins your only clean working uniform. That's one of the Laws of the Sea (the seventh of 35, we think...).

Packing your seabag is an important skill to develop. We have already discussed uniform selection, but since we hope you will not be working all the time, your happiness and comfort will depend upon additional items you packed. Space is limited so you can't bring everything; however, with a little common sense and optimistic anticipation of moments to enjoy, bring sports equipment (tennis racquets, golf clubs, snorkels, etc.), reading material, chessboard, a CD player, backgammon, VCR and television set. It's amazing how frequently these things get used. Also common sense items like a six-month supply of your favorite toiletries, since the ship's store may run out and your next port may be inadequate.

You will almost certainly want to bring your favorite medical instruments, stethoscope, otoscope, etc., and especially those medical books that help you deliver primary care. Some texts are required and are maintained in the ship's library, but don't count on that. Check and supplement the existing library.

The choice of titles is up to you, but these are considered some good basics:

- Harrison's PRINCIPLES OF INTERNAL MEDICINE
- Barker – AMBULATORY MEDICINE
- Christopher's TEXTBOOK OF SURGERY
- DeGowin – DIAGNOSTIC EXAMINATION
- Netter – ATLAS OF HUMAN ANATOMY
- Fitzpatrick – COLOR ATLAS OF DERMATOLOGY
- Connolly's MANAGEMENT OF FRACTURES AND DISLOCATIONS
- Washington University – MANUAL OF MEDICAL THERAPEUTICS
- Conn's CURRENT THERAPY
- Tintinalli's EMERGENCY MEDICINE

Manson's – TROPICAL MEDICINE
CONTROL OF COMMUNICABLE DISEASES IN MAN
CURRENT OB/GYN DIAGNOSIS AND TREATMENT, DeCherner & Pernoll
CONTRACEPTIVE TECHNOLOGY, 1998
DIAGNOSTIC AND STATISTIC MANUAL OF MENTAL DISORDERS IV
US Health Service's PUTTING PREVENTION INTO PRACTICE

Most of these recommended texts are required per BUMEDINST 6820.1 and BUMEDINST 5604.1. If not required, you definitely should have a basic textbook of Obstetrics and Gynecology, as well as Pediatrics (Appleton-Lange). Female sailors are an ordinary sight on ships these days, plus there is always a chance you'll be treating refugees.

One final word on what not to bring: "contraband." The Navy is very strict in its enforcement of rules against illegal drugs. (There is no confusion about the Navy's stand on drugs.) What some may not realize is that the Navy is equally serious about its prohibition of alcohol aboard ships. There is a myth common in the Medical Corps that it is really "okay" for physicians to have liquor aboard if they tell everyone it's for "medicinal purposes" and that the Captain will wink and look the other way. This is not the case. Really. Don't do it.

Equally illegal is the possession of personal firearms. If you are one of those graduates of inner city medical schools who developed the habit of carrying a sidearm for survival, check with the Master-at-Arms; most ships have provisions for storing them.

Chapter 1, NAVAL ETIQUETTE

THE QUARTERDECK

The Quarterdeck is the nerve center of the ship when not underway. The Officer of the Deck stands watch there to receive all personnel coming aboard. To properly enter the Quarterdeck, one must stand facing the fantail, at the rear (aft end) of the ship, and salute the “ensign” (the United States flag). Then face the Officer of the Deck (OOD) and salute again, saying, “Request permission to come aboard”. Always salute, even if the OOD is junior to you. The OOD is considered the CO’s official representative on the Quarterdeck and is accorded the respect of that position. The OOD will say “Permission granted” and may ask for your ID card. Don’t EVER go ANYWHERE without your ID card! You should have it on your person at all times; you either can’t get there, or you can’t get back, without it. To leave the ship if you’re not a member of the crew, do everything in reverse order, and say “I request permission to go ashore.”

After you have reported aboard, when you are a member of the ship, you, as an officer, do not have to ask permission. Just state that you are returning or have permission to leave the ship. Remember that enlisted sailors ask permission. Commissioned officers always have permission (if a part of the crew). Odd but true. Between sunset (at night) and 0800 (morning), the ensign is not flown. DON’T SALUTE A NAKED FLAGPOLE! Simply salute the OOD as described above.

Since the Quarterdeck is the ceremonial receiving station, there are rules of etiquette to follow. Always stay covered. Never be on the Quarterdeck without wearing your cover (hat). As a matter of fact, always wear your cover outside the skin of the ship (mostly anywhere on the main deck, 0-1 level, or above). This may not be required at sea, but it is always required in port. It is proper, and you will not be able to return salutes or be saluted unless you are covered. If you are saluted when uncovered, the book response is a nod and a verbal “good day” or some other acknowledgment. To return the salute is technically incorrect, but polite, and unlikely to cause a problem. Always take saluting seriously. Your shipmates do. You are an officer and expected to render military courtesies appropriately, as well as to insist that they be rendered to you.

Another steadfast rule is NEVER to eat anything on the Quarterdeck! Eating is done only in the wardroom or in the enlisted messing areas and is generally prohibited elsewhere on the ship. This helps prevent cockroach problems that can arise from food particles strewn about—and you should set an example. Likewise, the Quarterdeck is not an area for socializing or sunbathing. Such activities should be avoided within sight of the Quarterdeck while in port. That doesn’t mean that you can’t go up on the higher decks and get some sun while underway. However, it is not a good idea to take a picnic lunch, radio, swim trunks, and suntan oil to spend the entire afternoon trying to get a tan. There will be specific times, usually during lunch or when on holiday routine, when you will be able to “catch some rays,” weather permitting. Be discreet about this privilege; many of the crew will not have it for various reasons, and resentment can develop. You should also be setting the example in trying to prevent skin cancers.

THE WARDROOM

The Wardroom is each officer's seagoing home, a home in which you should be proud to entertain your family and friends. Whatever the circumstances, it is a place where members should conduct themselves with common sense and good manners. It is the officers' dining and lounge area. Depending upon the size of the ship, the Wardroom may consist of a separate dining and lounge area, or be combined into one room.

In addition to observing rules of etiquette, local customs, and traditions, there are some general rules you should know:

1. Always remove your cover when entering the wardroom. Officers traditionally buy a round of "cheer" at the Officers' Club or next liberty port for all those present at the *faux pas*.
2. You are required to pay to become a member of the Wardroom mess. This is termed a "buy in" and is in addition to regular mess charges. When reporting aboard, find out who the Mess Treasurer is and make arrangements to join. And always pay your mess bills on time and in full. NO excuses!
3. Never appear in the Wardroom out of uniform. Civilian attire is allowed in the wardroom for brief periods only when departing on, or arriving from, liberty.
4. Show consideration for your fellow officers when using a radio, CD, or television.
5. Magazines and newspapers should be handled carefully. They should not be left adrift or be removed from the wardroom.
6. Your feet belong on the deck, not the furniture. If you wish to sleep, you should retire to your stateroom.
7. When leaving the wardroom, leave the place neat and orderly, whether or not you found it that way.
8. Depending on the wardroom, meals are served promptly at the times indicated. Be punctual for all meals. The senior officer present will be informed when the meal is ready. Everyone will then proceed in an orderly fashion, senior officer first, into the mess. Find out the policy and meal times ASAP to avoid embarrassing yourself.
9. At formal meals or if it is the wardroom's custom, officers and guests should remain standing until the senior member of the mess is seated. Any officer who is late to a meal should request permission to join the meal from the Mess President or the senior officer present before sitting down. The custom is to say, to the senior officer present, "Request permission to join the Mess," and look a little apologetic. Newcomers are given some leeway if late, and emergencies are understandable, but try to be on time for meals. For departing while there are still diners at the table, request permission to be excused, again from the senior officer present.
10. There is no objection to dropping into the wardroom for coffee, but do not make a practice of loitering there during working hours.
11. Any complaints about the wardroom food, etc., should be made to the mess caterer and not to the messcooks. A short word about messcooks (Food Service Assistants, FSAs) is appropriate at this point; FSAs are usually E-1s to E-3s who are new to the command (with the exception of medical and dental personnel). A requirement for all enlisted personnel at this level is to be FSAs for about ninety days. This is a grueling job that can take fourteen hours a day, seven days a week. They are responsible for cleaning the galley spaces, mess decks, CPO lounge, wardroom, First Class lounge, and, on many ships, the officers' staterooms. Most messmen are 18-20 years old and have never worked so hard

in their entire lives. Most of the time they will be very tired and feel beleaguered by the work required. Their ninety days seem endless. If you keep these facts in mind when one of them falls asleep while serving you dessert or slumps over when trying to clean the deck, have a little compassion. They work hard and try to do their best.

12. "Midrats" (midnight rations) are provided for the oncoming and offgoing midwatch; i.e., the people standing watch from twelve o'clock (midnight) to four in the morning. The food set out is specifically for them, NOT for those returning from liberty with the munchies. If you do want to partake of midrats, remember; don't "pig out" and eat everything. This will make the watch very grumpy and you become most unpopular. Remember: we take care of each other.

THE BRIDGE

The bridge is the area of the ship where the helm and navigational equipment are located. While underway, the Captain will spend a lot of time either on or near the bridge. It becomes the center of the ship and also functions similar to the Quarterdeck, since all announcements from the ship's overhead paging system (1MC) are made here. While underway, the bridge is manned by the Officer of the Deck, the Conning Officer, the Quartermaster (an enlisted navigational aide), the Helmsman, the Boatswain (pronounced "Bos'n", with a long "o"), Mate of the Watch, a Navigation officer, at times the Executive Officer (the chief navigator), and, of course, the Captain. It can be pretty crowded.

Before entering the bridge while underway, you should always ask the Officer of the Deck's permission ("OOD, Request permission to enter the Bridge."). During busy navigational operations, such as leaving and entering port, refueling operations, etc., keep a low profile. While the bridge is an interesting place to observe operations, too many people on the bridge can be a hindrance to the bridge team. Always keep covered on the bridge unless told otherwise. Do not use the Captain's chair, door, or passageway. DO NOT even THINK about traversing through the Captain's or Admiral's Country for any reason other than official business. These are hallowed areas on the ship and are given the utmost respect by all members of the crew. These areas are easily recognized by all the blue and gold paint and fancy ropework. And the big signs.

Chapter 2, HELPFUL HINTS OF GENERAL INTEREST

You need to know the following to get by while on board. These are not necessarily items of etiquette; nevertheless, they will help make your tour smoother.

1. The exception to wearing your cover outside is the flight deck during flight operations. You might lose it into the intakes of an engine and damage the aircraft, as well as seriously mangle your cover. The flight crew will have seizures if they see you walking around with your head covered. Managing their post-ictal states will create more work for you, and you don't need the business. Loose stuff like hats are called "FOD", for "foreign object, damaging."
2. Remember to mark all laundry with your name and social security number. Some ships require first letter of last name and last four numbers of your social security number. If not properly marked, clothing goes to laundry heaven and you could end up wearing white socks with your khaki uniform. Even with the name and SSN you may not get the right underwear or socks back!
3. Make sure you never give away the name of your ship, its location, or its destination on a non-secured phone line. If you do, the communications officer will make you speak in sign language for the remainder of your tour.
4. At various times during the day, you may hear a series of bells followed by an announcement that someone important is coming aboard the ship. If it is the Captain, and the Captain is really an O-6, you will hear four bells (done in pairs), followed by the words, "[Neverdock] arriving". (The Captain is customarily given the ship's name as a title.) The same applies for commanders of squadrons, fleets and forces. For example, the Commander of the Naval Surface Forces, Pacific would be called SURFPAC. If a Rear Admiral, six bells are rung (or a bell is struck six times) and "SURFPAC arriving" is announced. Anytime you hear bells followed by an announcement that someone is coming aboard, rest assured that it is someone senior. The bells tell you how senior. If you are in the area when someone arrives who is rung aboard, stand at attention and salute as they pass. You will never go wrong. For more details, consult the Watch Officer's Guide.
5. More about bells. Time is counted on board ship using the long-standing "bell" method. Each half-hour from midnight adds a bell up to a total of 8, then starts over. Most ships will only use this while underway, but in port, eight bells in succession will ring twelve o'clock noon. Don't mistake this for a fire alarm, which sounds similar if the eight bells are rung quickly. And don't confuse this with a full Fleet Admiral arriving. At first it may seem like bells are ringing everywhere, but eventually you will get used to it. And if you are not sure, just ask someone.
6. There is terminology you need to have cold when you come aboard.
DECK—the deck is the floor. Don't call it the floor. Every sailor on board will look at you funny. Almost every lower horizontal surface is referred to as a deck.
BULKHEAD—any wall.
HATCH—usually separates one deck from another deck. Hatches usually are considered to separate vertical areas; doors separate horizontal areas.
DOOR—On a ship, a door is a door. It separates one bulkhead from another. A door is not a hatch. Hatches go up or down.
OVERHEAD—the ceiling.
SCUTTLEBUTT—the water fountain. This term also refers to shipboard gossip.

GEEDUNK—junk food, bought at ship's store or from vending machines. Also a reference to the red-and-yellow National Defense ribbon awarded for breathing.

GALLEY—the kitchen. Your official duties include regular inspection of all galleys onboard.

LADDER—actual ladders, and also ordinary stairs, are referred to as ladders.

HEAD—restrooms/toilets.

GREY WATER—Used water from showers, laundry, and galley areas. Not as big a problem when there is a leak.

BLACK WATER—Used water from toilets. This is a BIG problem when there is a leak. (See “CHT spill” for what to do.)

PASSAGEWAY—hallway.

This may all sound a little trite, but it is a big deal on board. If you want to avoid being unmercifully abused by the members of the wardroom, understand and use these terms. Your new co-workers and patients will.

7. When speaking to the Captain, use the term “Captain” or “Sir” or “Ma’am”. Avoid using the term “Skipper”. This term is primarily used by senior enlisted personnel toward the Commanding Officer. Officers do not refer to the Captain as “Skipper”, “the Old Man”, or “the Boss”. The Captain is the Captain and that is the right title. And the Commanding Officer of a ship is always “the Captain”, no matter what rank.
8. In the presence of the Captain, it is advisable to never use the term “old tub”, “rustbucket” or any other derogatory term when referring to the ship. Say anything negative about the ship in the presence of the Captain and your life aboard will take on a surprising new luster....
9. Always listen to the 1MC (the shipboard announcing system). All emergency information is passed there and you and your corpsmen need to know where to go. You'll also hear informational items, like that the CO or XO is looking for you. You will learn the phone numbers soon enough, and it's very poor form to need to be paged more than once to contact the XO or CO just because you weren't paying attention. At times it may seem like the 1MC is always on (especially during certain evolutions), but you learn to listen for the beginnings and tune out the required repeats during special evolutions. Some ships announce when meals begin or end (“are secured”), when “sweepers” (designated times to sweep and clean up the ship) are held, and when meetings or other events are beginning, in progress, or ending. It may take some time to turn the sounds coming out of the 1MC into words and phrases. Be patient. You will understand them easily in a few weeks.
10. When using government-issue binoculars, ALWAYS ensure that the strap is around your neck. Otherwise, an unexpected roll of the ship can jar them from your hands and send them crashing to the deck or over the side. A difficult situation to explain and a large personal expense. If this happens, you can also expect that a plaque will be displayed in the wardroom in your honor noting the longitude and latitude where “your” lost binoculars rest in peace.

Chapter 3, NAVAL CORRESPONDENCE

The Navy has a very specific way to communicate with the rest of the world, whether it is by letter, message, or radio. The GMO Manual has general information on operational security (OPSEC) and correspondence. For more details you will need to refer to OPNAVINST 5510.1 series, SECNAVINST 5216.5 series, or the Navy Correspondence Manual for details of Naval Correspondence. A useful resource is the “Guide to Naval Writing—A Practical Manual,” which has examples of all types of official and unofficial Naval correspondence. It is available from the Naval Institute Press (800-233-8764).

All official mail leaving the ship must be routed through the chain of command for approval. Everything official leaves the ship with the Commanding Officer’s signature, and the CO is responsible for all communications from the ship. To ease the CO’s workload, you may be given “by direction” authority for some official off-the-ship correspondence. This is where you can sign official correspondence that must come from the CO. This is generally limited to routine required reports or routine requests for information. If you are given “by direction” authority, use it wisely, for it can easily be removed. Always remember you are signing for the Captain, and if it is ANYTHING that the CO MIGHT want to have input on, route it for the CO’s signature. The same is true if you have message release authority (see below). Be careful, since once your letter or message is on the street, you can’t retrieve it, and if your actions cause the command ANY embarrassment, you WILL pay the price. Again, when in doubt, at least run it by the XO to CYA.

MESSAGE TRAFFIC

Ships have various methods of disseminating the multitude of naval messages they receive each day. One of the Medical Officer’s duties is to read message traffic each morning. Some Communications Departments have a pickup area for arriving messages. Other ships distribute messages electronically via a shipboard computer LAN. As Medical Officer, you will receive all message traffic pertaining to your department, as well as the health and welfare of the crew. You might not receive SECRET-level messages, but you must have access to CONFIDENTIAL-level material.

The series of letters and numbers at the top of the message will make no sense, but they are somewhat explained below. Read on until you reach the body of the message, which will be in “Navy English.” Almost everything is abbreviated. It will take some time to recognize that COMUSNAVLOGSUPFOR is a person and not a video game. Don’t be too proud to ask someone to interpret.

Writing a message can be even more of a nightmare than reading one. Before attempting to send a message, get help from the HMC or your LPO (Leading Petty Officer). You will need to write the body of the message and have the chief or LPO draft it in the correct form for transmittal. Certain types of messages have specific formats, e.g., LOGREQS (logistics requisitions) before a ship enters port, etc. Talk to the respective department heads for the specific message formats. All other general messages are now required to be in a specific formatted style also. This is called JINTACCS (Joint Interoperability of Tactical Command and Control System). This is intended to standardize message writing throughout all the services, so that we can talk

to each other easier. The messages are further broken down into administrative or operational messages. Hence the term GENADMIN message (general administrative message). This will be the category of almost all your messages.

Two words regarding security procedures surrounding message traffic: BE CAREFUL! Messages that are classified confidential or secret are not for public consumption and must be handled according to security regulation. Disposing of sensitive material via shredding or burning is performed Navy-wide. This is normally managed by the Communications Department onboard a ship, but it is every member's responsibility to ensure the security of classified material. "Burn bags" are available for proper disposition of sensitive documents. Do not throw message traffic in the waste can or over the side. This will give the Communications Officer a heartburn that Maalox can't cure. Messages kept on file should be in secure locked file cabinets and not in your personal locker. In addition, NEVER copy classified messages/materials!! You won't be getting anything that will endanger national security, but you'll lose sleep after hearing from the COMMO. Don't take message security lightly.

To help you decipher message traffic, a sample message format follows. Numbers corresponding to the lines of the message are followed by an explanation.

- Line #1 – this line corresponds to the priority classification of the message. A message has a priority rating of "Routine", "Priority", "Immediate", etc. The rating determines how fast the message will be sent. If the message is routine, rest assured it won't arrive by the end of the workday. The radioman is not going to interrupt a coffee break to send out a routine message. "Priority" messages will probably arrive the same day. "Immediate" means stat, and Medical Officers rarely deal with these. Radio Central is manned by a group of professionals who will do anything they can to help you. If you are not sure about classification, ask them for help.
- Line #2 – A group of numbers and letters used by radio personnel for transmission and processing purposes. You do not need to know any of this.
- Line #3 – This is the date-time grouping. The first two numbers are the date; the next four correspond to Zulu time (Greenwich Mean Time, located in Greenwich, England) that the message was sent. The month and year are next. For example, 15094OZ Nov 90 is 15 Nov 1990 at 0940 Zulu time.
- Line #4 – FM means "from;" also referred to as the originator.
- Line #5 – Recipient of the message. Also called action addressee.
- Line #6 – N9 is an office code, which is intended to direct the message to the correct individual or office. Radio or Ops can help you look them up—Medical is usually N12 or 012.
- Line #7 – INFO: those who receive a copy of your message. These should include senior medical and line commands and advisory units (Preventive Medicine Units); this allows heads-up on pending or ongoing medical problems.
- Line #8 – Security classification of the message. Messages classified as confidential, secret, or top secret are not for public consumption and should not be used for paper airplanes.
- Line #9 – Required in JINTACCS message form. If you have a message writing program on the computer this is already in the program. Otherwise, you must add it on each message.
- Line #10 – Subject line; what the message is about.
- Line #11 – References

Line #12 – Body of message. Be brief, but concise. Many messages begin with “IAW REF A”. This translates, “in accordance with reference A”. If you don’t have reference “A,” get it.

Line #13 – “1 of 4” refers to the page 1 of a 4-page message.

Line #14 – BT means, “break transmission” signaling the end of the message. For more than one page messages without “BT,” you could miss half the information without being aware of it.

This should give you a rough idea of how to decipher message traffic. The Communications Officer is always the expert in deciphering the gibberish transmitted over the airways if you need a consult.

NB: Email is becoming more common on ships. The rule of thumb, however, is that for information to be “official,” it has to come to the ship or leave the ship as Navy message traffic.

ROUTINE	#1
RAAUZYUW RHIPAAA 3651 3191738-UUU-RUCACC	#2
ZNRUUU	
R 15094OZ NOV 90	#3
FROM: USCINCCENT//CCSGH	#4
TO: USCENTCOMREAR MACDILL AFI3 FL//CCSG//	#5
DIRAFMIC FT DETRICK MD//	
COMUSNAVCENT//SG//	
COMUSMARCENT//MED//	
COMUSNAVLOGSUPFOR//N9//	#6
USCINCPAC HONOLULU HI//	
USCINCLANT NORFOLK VA//	
CNO WASH DC//0P0932//	
INFO: NAVENPVNTMEDU FIVE SAN DIEGO CA//	#7
NAVENPVNTMEDU SEVEN NAPLES IT//	
NAVENPVNTMEDU SIX PEARL HARBOR HI//	
NAVENPVNTMEDUTWO NORFOLK VA//	
NAVMEDRSCHU THREE CAIRO EG//	
UNCLAS	#8
SECTION 1 OF 2	
OPER/DESERT SHIELD//	
MSGID/SYS.RRM/USCINCCENT CCSG-PMZ/	#9
AMPN/SUBJECT: PREVENTIVE MEDICINE GUIDANCE FOR OPERATION	
DESERT SHIELD//	#10
REF/A/HEAT STRESS INJURY PREVENTION/NAV MED P-5052-5//	#11
RMKS/1. THIS GUIDANCE APPLIES TO UNITS DEPLOYING TO DESERT SHIELD. VIGOROUS AND EFFECTIVE PREVENTIVE MEDICINE PROGRAMS WILL BE ESTABLISHED AND CONDUCTED IN ACCORDANCE WITH APPLICABLE SERVICE DIRECTIVES AND REGULATIONS. PARTICIPATING UNITS WILL IDENTIFY PREVENTIVE MEDICINE REQUIREMENTS AND ENSURE TRAINING/CERTIFICATION OF FIELD SANITATION TEAMS (FST). IN ADDITION, UNITS WILL IDENTIFY AND TRANSPORT	#12
SUPPLIES/EQUIPMENT REQUIRED TO PROPERLY EXECUTE FIELD SANITATION MISSION. PARTICULAR ATTENTION WILL BE GIVEN TO:	
A. PREVENTION OF HEAT INJURIES. IAW REF A, ENVIRONMENTAL CONDITIONS WILL BE MONITORED UTILIZING WBGT INDEX AND APPROPRIATE WORK/REST CYCLES EMPLOYED. TO AVOID DEHYDRATION, WATER INTAKE MUST BE MONITORED AND ENFORCED. THIRST IS NOT AN ACCURATE INDICATOR OF HYDRATION. SKIN PROTECTION OF EXPOSED PARTS OF THE BODY NECESSITATES T14E USE OF SUNSCREEN WITH SUNSCREEN PROTECTION FACTOR (SPF) 15 OR GREATER. HOT CLIMATE, LIPSTICK, ANTI-CHAP (WITH SUNSCREEN) WILL BE USED FOR LIP PROTECTION.	
PAGE 01 OF 04	#13
BT	#14

RADIO COMMUNICATIONS

While we are on the subject of messages, a few words should be said about talking over the radio, ship-to-ship or ship-to-shore. When talking on a non-secured voice net (a radio network that is not scrambled for security purposes), never divulge the name of your ship, the name of the ship you are talking to, your destination, your heading, or where you came from. All locations are given in code (the codebook is in the safe in CIC), and all ships have call signs that change daily. These are posted in CIC, the radio room, and on the bridge, and the call signs are what you use to identify yourself and others when talking on non-secure nets. Transmitting any of the previously mentioned information unencoded is a terrible breach of security because anyone can listen in and monitor what you are saying. (Yes, someone probably IS listening right this very moment!) Note, when you pull out of major US ports, a "fishing" boat will be there. If you give out classified information, you can, genuinely, endanger your ship as well as its mission. This is of paramount importance during wartime, but line officers can have a cardiac arrest if you do it anytime.

Always keep messages brief and to the point. Speaking over the radio should be considered a business conversation and not a call home. State your business, conduct it, and relinquish the net so other units can conduct their business. If you are talking over a secured voice net, security is less of a problem; however, the business rules are the same. Only stay on the net long enough to conduct your business. A secured voice net is no place to discuss golf with a friend on a neighboring ship.

Techniques for talking on the radio are easily learned but take practice. Any ham radio operator will have no problem adjusting to the military system. For those who are not hams, just remember to say "over" every time you break a transmission (stop talking), so that the other person knows they can transmit, and, "out" when you are done with the message. Don't say "over and out;" just say "out." "Roger-dodger, good buddy, 10-4, pedal to the metal" and other CB code words are definitely inappropriate. More details of radio communications are in the Radio User's Manual (RUM), NTP 4, and NTP 5. And we look better if you do it right.

Other forms of communications include semaphore, signal flags, and flashing lights. During various operations and evolutions, e.g., underway replenishment of fuel and/or stores (UNREP/VERTREP), the radio net may be unavailable to communicate "routine" info/messages to a ship alongside. Signalmen can send and receive messages. You may need to learn how to send such messages. You will also need to learn the phonetic alphabet, i.e., alpha, bravo, charlie, etc. (see Appendix A).

Chapter 4, SHIPBOARD ORGANIZATION

To get a better idea of how a ship is run, it is essential to understand the command structure. Shipboard chain of command is like any other military chain. The Ship Organization and Regulations Manual (SORM), OPNAVINST 3120-32, will cover this in detail. The Commanding Officer is assisted by an Executive Officer and a number of Department Heads in each administrative division of the ship. Under each Department Head are variable numbers of Division Officers, if the department is large enough. Under Division Officers are the Leading Chief Petty Officers (CPOs) and the Leading Petty Officers (LPOs) of the divisions. CPOs and LPOs actually lead the crew.

The following discussion is a general outline of the departments on most ships. Each doc needs to learn the ship's organization by heart. Departments may include Weapons, Deck, Operations, Engineering, Air, Navigation, Supply, Administration, Repair, and Medical/Dental. Under each of these departments are a variable number of divisions. Ships are self-contained floating cities. They generate their own power and water, are responsible for waste disposal, food and clothing (with clean clothes), providing medical and dental care, communications, and transportation. Each ship contains all the support services necessary to keep personnel entertained and content on those long sea voyages. In addition, each ship has a unique mission, whether that be as a war machine, a supply/support vessel, or a repair ship. This mission is the ship's purpose, and all departments and services exist in support of that mission. Every crewmember has a role to play in the support of that mission, and every crewmember is expected to fulfill these responsibilities.

Command responsibility begins at about the E-4 level (Third Class Petty Officer) and rises. Petty Officers are given graduated responsibility as they advance through each level. At each step they are required to exert more leadership influence over those who work for them, and everyone answers to the next person up. This system allows each person to be responsible for the particular orders given at any particular time. SOME individual SOMEWHERE in the chain of command is responsible and accountable for EVERY job.

This system lends itself to job completion. When responsible for a particular action, people tend to do a better job. It is much better to tell one person to be sure all the hatches in a compartment are dogged down properly than it is to tell the entire compartment it must be done and hope somebody will take the initiative.

DEPARTMENT HEAD

As the Medical Officer, you will serve as either the department head or division officer for your department. Your job is essentially the same either way, except a department head has more administrative responsibilities, as well as the opportunity to influence the other departments in the ship.

Your duties within the Medical Department will be basically the same whether you are designated as department head or division officer. If you are the only Medical Officer aboard, you will make all the medically related decisions. Keep one truth in mind at all times; the Commanding Officer is responsible for everything that occurs on board and

ultimately makes ALL decisions, including medical matters. You may advise, but you may never tell the CO what to do. The Captain will seek your opinion and advice on medical matters, but the final say on each and every subject rests with the CO. Note, though, that if something goes wrong medically, you will be held accountable along with the CO.

The head of each department is responsible to the XO and the CO for smooth day-to-day operations. Policies set forth by the command are given to each department. It is the department head's responsibility to ensure that these policies are implemented whether you agree with them or not. The department head is also responsible for the budget, supplies, departmental training, material maintenance, and personnel management—in other words, everything. Some freedom is allowed in setting working hours for your crew. You'll attend all department head meetings, officers' call, and eight o'clock reports (an evening "chat" with the XO) while underway.

In today's Navy, as elsewhere, the Medical Officer must be an administrator as well as a clinician. Administration is not an easy skill to acquire, and it takes a concerted effort on your part to become an effective administrator. If you prove unable to manage your department, you will lose your administrative responsibilities to someone who may not be as medically well-trained but who will be able to make the necessary decisions. That is obviously less than ideal. Only interest and initiative on your part will keep your fate in your own hands. It cannot be stressed enough that you must do both jobs (administrator and Medical Officer) equally well. Only you have your department's best interests at heart, and if you lose administrative control of your department, you will have a very difficult time getting it back.

DIVISION OFFICER

Each department head will usually have one or more division officers who work directly under them. The division officer is the "action" officer who takes the programs initiated by the department head and implements them. The "DivO" works more directly with the petty officers and the troops. DivOs do most of the "legwork" and may end up doing "gopher jobs" or "hatchet jobs" that can be unpleasant.

If you are the division officer, but someone else is your department head, fine—this will relieve you of some of the administrative burdens. But remember that the medical decisions are yours; don't allow decisions on patient management to be dictated by anyone but you! You are responsible. However, you must keep the CO and XO informed and provide your professional medical opinion on the benefits and consequences of specific medical management. The Captain, though, has the ultimate responsibility, based on the tactical situation, as to the final disposition of your patient (e.g., to MEDEVAC versus transfer once in port). Don't be a "yes-man" with no input to the policies of your department. If you don't like something, say so. No one will cut you in half for expressing your opinion, and when medical concerns are at issue, your opinion is expected.

If you are the department head and have a division officer, that person is usually a Radiation Health Officer, an Environmental Health Officer, or a Health Care Administrator. Either way, your DivO is a Medical Service Corps Officer who may or may not have any hospital experience. Regardless, that division officer is your

administrative assistant, responsible for ensuring that all the military administrative and medical administrative matters are carried out. You, in turn, are responsible for ensuring that this is done, but they should supervise and keep you fully informed.

The division officer is also the departmental training officer, ensuring that all required training is scheduled and completed. (See Training for more details.) On larger ships, they usually have an assistant to do the routine paperwork of rosters, etc. They will also keep a Division Officer's Notebook on each corpsman. This will contain basic biographical data, awards, copies of periodic performance evaluations ("evals") done on board, training completed, and advancement progress. They will do quarterly counseling with each corpsman regarding their progress and will assist the corpsmen with correcting any deficiencies promptly. You should be working closely with your division officer and, since Medical usually only has one division, the division officer should be acting department head in your absence. Your physician's assistant (PA) or independent duty corpsman (IDC) will be the medical representative in your absence.

You and your division officer may also be given collateral duties assigned outside the Medical Department. The command tries very hard not to give you collateral duties (though the division officer is fair game), but on smaller ships there are programs that an officer must supervise and you will then be expected to carry your fair share. These are YOURS and not your department's. If you are the "tours officer," don't expect your chief to do that job for you! Use your chain of command but don't abuse it.

Below is an outline of the various departments and their responsibilities.

DECK

The head of the Deck Department is called the First Lieutenant. Deck is in charge of lines, anchors, cranes, boats, painting, general deck maintenance, and sometimes weapons. On ships without an Air Department, Deck will also be responsible for the flight deck and air operations. If you are assigned to an amphibious ship, the Deck Department will be in charge of the well deck and the stern gate. Vehicle storage areas, ammunition dump areas, and paint and gear lockers fall within their domain. The Bosun's Locker also distributes the toilet paper and cleaning supplies.

Many times the First Lieutenant will be a Limited Duty Officer (LDO) who is a former Boatswain's Mate. The Deck Department consists mostly of personnel rated as Boatswain Mates (BM rating—the oldest rate in the Navy). These are the sailors with the greatest fund of deck seamanship knowledge that you'll find anywhere. If you thought tying knots was great when you were in Scouts, you should see these people. If Deck has the Weapons division, there will also be Gunner's Mates and other weapons rates. These people are responsible for all firearms, from pistols to cruise missiles.

The Deck Department usually has most of the new recruits and non-rated personnel—a fertile source of "sick bay commandos" because of the manual labor type of work.

WEAPONS

On warships, Weapons is a separate department, which of course controls the various weapons. On support ships, Weapons and Deck are usually combined.

OPERATIONS

Operations consists of radar, combat information center (CIC), sonar, fire control, and electronic warfare divisions. This department is headed by the Ops Boss, who is usually senior in the chain of command and, thus, the Senior Watch Officer (responsible for the ship's watchbills). The ratings within this department are Operations Specialists (OS), Sonar Technicians (ST), Fire Controlman (FC), Electronic Warfare Technicians (EW), and Electronics Technicians (ET). Operations is usually in charge of both warfare evolutions and peacetime evolutions concerning specific tasks. They coordinate logistics requisitions, port call visit requirements, and shipwide training. The Operations Officer is also responsible for ship's operational security in regards to classified publications, messages, and correspondence. Ops makes sure that classified information doesn't leave the ship improperly and is destroyed properly. It is important to learn early what information is and is not classified. Some medical information is classified, so you will have to understand what security is all about. On some smaller ships, Medical may be under Operations.

In addition, message boards are usually readily available in CIC. It is a great way to keep up with what's going on while you're at sea.

ENGINEERING

This is one of the largest departments on the ship. The Chief Engineer (referred to as CHENG, pronounced "CHANG") is in charge of running all machinery, electrical, propulsion, repair, as well as the air conditioning and refrigeration plants. Engineering may also be in charge of ballast control, damage control, fire parties, rescue assistance parties, and repair parties. On ships powered by nuclear propulsion, the power plant will be a major concern for you, as well as for the CHENG, since the nuclear Navy runs a very strict radiation health program. More later.

Some of the ratings included in Engineering are: Machinists Mates (MM), Hull Technicians (HT), Enginemen (EN), Electricians Mates (EM), Interior Communications Electricians (IC), Gas Turbine Specialist (GSM), Gas Turbine Electrician (GSE), Damage Control Technician (DC), and almost any other rate with mechanical skills. Newly enlisted personnel assigned to Engineering are designated Fireman (FN) and usually become rated as one of the above specialists as they are promoted. Other nicknames you will hear include "snipes," the "oil king," the "water king," and the MPA (main propulsion assistant). If anything goes wrong with the ship, the Captain will call on these people to correct the problem. They make the ship go, stop, turn, and sometimes go dead in the water. They are in charge of making fresh water and electricity. They make sure that the showers and heads work and the sewage is safely removed from the ship. They fix your phones and your lights. This is a group you need to know and will know intimately. Engineering and Supply are where 90% of your Preventive Medicine and

Occupational Health programs are. Get to know all these officers very well. It will make your job much easier if they are on your side.

The Chief Engineer is an individual with lots of work. A CHENG may need particular care on audiograms, since they may have or develop high frequency hearing loss from being down in the noisy Engineering spaces too long. Many Engineers could also use a little suntan!

AIR (NOT ALL SHIPS)

The “Air Boss” is the department head and is a naval aviator (“airdale”) with either helicopter or fixed-wing aircraft pilot experience. Air is in charge of all flight operations, flight quarters, flight deck maintenance, and, many times, the parking lot signs in front of the ship (strange but true). The Air Boss is a good person to get to know well in case you ever need transportation to terra firma. There is no better way to travel than their friendly skies. Aeromedical evacuation of your patients will involve close coordination with the Air Boss.

NAVIGATION

The XO is usually the designated ship’s navigator. However, most ships have an Assistant Navigator, who is the department head for the Navigation (Nav) Department. On other ships, Navigation will fall under the Operations Department. NAV consists of QM (Quartermaster) rates. They are in charge of the charts, plots, and the navigation details when underway.

The Navigator is also responsible for sending out MOVREPS to inform the Squadron, Group, and Fleet Commanders of the ship’s location and status. The only reason that this is of concern to you is that, since you are the Medical Officer, when you go on leave or TAD, the Navigator must file a MOVREP. The Navigator will be eternally grateful if you route your leave/TAD papers through the NAV “IN” box, and then offer a brief reminder the day before you leave and again upon your return. It’s called helping out your shipmates, a practice that will stand you in good stead.

SUPPLY

The Supply Officer (SUPPO) is the department head. Supply officers are also referred to as the pork chops or box kickers. Food service, ship’s store, and the disbursing officer work for the SUPPO. This department conducts the ordering and purchasing of all supplies, including medications and medical supplies, for the ship. Each department files orders for their supplies, but the Supply Department gets the order off the ship, receives the goods, and distributes them.

Supply also includes disbursing. Where you get paid. Your friendly disbursing clerk will actually try to keep you happy, hoping that you won’t lose their shot record. Ratings included within Supply are Mess Specialist (MS), Storekeeper (SK), Ship’s Serviceman (SH), and Disbursing Clerk (DK). Even though you have an Operating Target (OPTAR) fund of your own, all supplies that you order must go through the Supply Officer for

funding. It is a good idea to develop an effective working relationship with the SUPPO. Supply also owns the galleys, the laundry, and the barbershop; again, these are many of the areas that you and your people will be inspecting for sanitation and cleanliness.

ADMIN

A junior officer usually heads the Admin Department, which is in charge of all official personnel records and correspondence received by or leaving the ship. The XO owns the Admin Department because most of an XO's job is administrative. However, since no XO can be there to manage personnel all the time, a junior officer is assigned.

Admin is in charge of personnel matters at the command level, including the Plan of the Day (POD), memos, letter writing, and the sea of paperwork upon which the Navy floats. They will not be a secretarial service for you unless they are not busy or it's very important (like your residency application), but they will teach your people what they need in order to communicate in proper naval-ese. They will also order any instructions or directives that you need for your files, and they should have a master file of Navy instructions.

Admin will also help you obtain a microfiche copy of your personnel record and correct what is missing. It is a good idea to check your microfiche once a year, or at least the year before your next promotion board; you would be amazed at what is missing from your official service record. It is YOUR responsibility to ensure that your record is accurate and has a recent official photograph. If you don't do it, no one else will.

Most ships have an automated data processing center (ADP) with Data Processing Technicians (DP) and Data Systems Technicians (DS). These people program and run the computers that keep the master lists (alpha rosters) of all personnel on board. This is very helpful because they can also print these lists by blood type for your blood bank file, labels for blood tubes (for your ship's HIV draw), and regular alpha rosters for entire ship's shot days (like influenza). Depending upon the ship, the computer system can also contain training rosters, division officer notebooks, etc. Talk to the people in ADP when you get on board. On some ships, ADP is in the Supply Department.

The Admin Department also has other miscellaneous rates that are necessary for the smooth running of the ship, including the Postal Clerks (PC), Legalmen (LN), the Master-at-Arms force (MAA), who function as the shipboard law enforcement and security force as well as administering the urinalysis program and investigating report chits, and the Religious Personnel (RP), who may also run the library. Admin will also probably have the ship-wide TV system (SITE TV). This is a closed circuit TV system that can be wired into the shore lines in port or can run its own programs when underway. Interior Communications (IC) and Library and SITE journalist (JO) rates run this. Each ship has a video library and sets up the TV schedules based on what the CO wants. They also maintain the tape library of training films, and if they don't have what you want, they can help you make your own. (See also Training.)

NOTE: On larger ships, there will be one or more Chaplains who will be assigned to the ADMIN Department but who work for the CO.

COMMUNICATIONS

On some ships, the Communications Department is a division of the Operations Department, but on others, it may be a department of its own. It is run by the Communications Officer (COMMO). Communications includes all of radio central and the signal bridge. Under Comms are Signalmen (SM), Radiomen (RM), and Electronics Technician (ET) ratings.

Touring Radio is like going to the corner store for the daily newspaper. There you will get all of the important message traffic for the day, as well as world news while you are underway and out of range of radio and television communications. In some cases, this is electronically distributed throughout the ship.

Remember that two things you will need to know how to do are to write proper Navy messages and to talk properly on the communications nets. It isn't hard, but it takes some practice, and the COMMO can help you do both. Underway, those may be your only links to the outside world, and you will need to talk to specialists and to report information. The more you are able to talk like the rest of the Navy, the better off you are. Some ships have plain old telephone system (POTS) lines that function like a normal telephone. Find one early and talk nice to the owner.

REPAIR (NOT ALL SHIPS)

On tenders and repair ships, this is by far the largest department, and, in the Repair Officer's (RO) mind, rightly so, since repair is the mission of those ships. The RO is a senior Engineering Duty Officer and is responsible for a myriad of shops and repair facilities, including the Nuclear Support Facility and the Dive Locker. The Repair Department can repair or make almost anything imaginable. It is a floating factory, and if you are stationed with one, be prepared for occupational injuries and the occupational health-related problems associated with factories.

If you are not stationed on a tender, these ships are your best opportunity to get things made (like cabinets and shelves), get your spaces remodeled, and get forms printed and signs made, among other things. Every ship is scheduled for TAVs (temporary assist visits) with the tender, where jobs that are on your consolidated ship's work list or maintenance plan (CSMP) can be completed. All you have to do is fill out a 2-Kilo (a work request order), which describes what you want done in detail, and you can attach a 2-Lima (a drawing or blank form). Note: the 3M (Maintenance Material Management) System petty officer will explain how to fill these forms out. You then take the 2-K to your Ship's Maintenance Officer (SMO), who processes it and puts it on the CSMP. You need to pay attention when there is a call down for jobs (announced at Officer's Call or other shipboard meetings), so that your jobs can make the list and be completed. Your chiefs should know how this is done.

There are many other services available to tended units that you can use. There is an Industrial Hygienist on board who can perform your Industrial Hygiene Survey, or at least perform surveys of problem areas—i.e., heat stress, noise, ventilation, asbestos—as well as assist you in setting up your occupational health programs. There is also an audio booth, so you can get caught up with your audiograms. Their Medical Department has advanced lab and x-ray facilities, as well as an SAC 207 account for medical

supplies (more later on this) if you need them. All of this should be detailed in your ship's availability message to help ensure that your requests will be granted. But if you forget, personal contact with the tender's Medical Officer should suffice. Remember: professional courtesy goes both ways. There are also several dentists stationed on board who can help improve your dental readiness (see Dental Records).

MEDICAL/DENTAL

This department is headed either by the Medical or Dental Officer, depending upon the ship and who is senior. On most ships, they are separate departments, but they do work closely together. As Medical Officer, you will be in charge of sanitation, safety (medical aspects), ship-wide training for all medically-related topics, mass casualties, and, of course, taking care of the sick and injured. Your job may include duties no one else seems to want to do.

The Medical Department also has a unique role in the support of the ship's mission. Your job is to maintain the health and safety of the crew and to keep as many people on the ship as possible. This may require some rethinking on your part to achieve both goals. A crewmember in a short-leg walking cast won't be able to stand a watch in the Fireroom but may be able to clean the berthing compartment or help with admin work, thus maintaining the department's manpower. Don't make someone more disabled than they are. If a person needs bedrest or light duty, give it, but do not give blanket orders, and restrict duty only for as long as someone needs it. Work with the department heads to keep their people on board and not in medical hold. It can take months to get a replacement for an unplanned loss, and the department still has the same workload to do. The rest of the department must pick up the extra workload (you can't go out and hire someone). Temper this recognition with good sound medical care provided to every crewmember. It's a delicate balance in a complicated job.

Responsibilities both in and out of your department include leadership, training, discipline, and counseling. For personnel working under you, you will be team captain, schoolteacher, and mother and father, all wrapped up in one. While the idea of leadership may seem foreign and intimidating to some, physicians are, in fact, trained very well as leaders. You will also find, pretty quickly, that it is easier to lead a horse in the direction it wants to go. If you have good people assigned to you, and if they judge your leadership to be fair, open, and honest, problems will be small. If, on the other hand, you don't have the best people, or you're perceived as contradictory or petty or mean, your job will be much harder as you work to bring them along. You can't fire them and send them somewhere else. You must do the best you can with what you have on hand, then hope for the best. And your own behavior will serve as their model.

You will become a much more effective Medical Officer, and gain significant credibility, if you spend some time every day roaming the spaces and getting to know the personnel in their environments. You will often be there anyway, doing inspections. Pay attention to the crew; you will gain the added benefit of seeing the variety of workspace stressors, safety issues, shop morale, etc., that crewmembers face each day. If the troops see that you are interested in them, they will be more likely to come to you for help.

A note about the uniforms of others is in order at this point. You are going to encounter a variety of uniforms throughout your operational tour; the Navy is famous for its plethora

of ranks, rating badges, and insignia. These devices not only identify an individual's rank and branch of service but also indicate position in the chain of command and individual special qualifications. There are more than seventy enlisted rating badges, twenty warrant officer devices, and approximately twenty-five breast insignia for both officer and enlisted that will roll through your clinic.

The people wearing these devices have worked hard for them and are proud of their accomplishments. Use some spare time for you and your people to learn, at least, the more common designations and their meaning. Your department will score big points with your shipmates.

Chapter 5, DEPARTMENTAL ADMINISTRATIVE MANAGEMENT

When you first get on board, find out how things are done in the Medical Department and why, then see what is and isn't working. If it works, don't be quick to change things. If something isn't working, see if your senior personnel have suggestions, and then change things. **Go slow with new plans and programs**, and don't rush any changes. Your people are having enough of a change with a new boss. They don't need a new routine also.

One of the people who can best assist with your transition will be your Chief Petty Officer. You will gain instant credibility if you ask for assistance in learning the ropes of shipboard life. Nothing is more off-putting than a new officer who has an elitist "know-it-all" manner. Trust this; you don't know very much.

If you are the department head, you are responsible for everything that happens in your department. You attend Officer's Call in the morning and eight o'clock reports (which is usually held about 1830 while underway). These meetings are to inform the CO, XO, or the CDO (Command Duty Officer) of the material condition and status of the ship. Additional meetings that you will be required to attend include Captain's Department Head meetings; Planning Board for Training (PB4T), and almost all council meetings, i.e. Safety Council, MWR (Morale, Welfare and Recreation), etc. As you'll see, there are many meetings that require the department heads' attendance, and you are expected to attend and not to send a substitute unless it is an emergency.

For morning report, department heads or all officers muster in formation, as and where the XO requires, to receive the plan of the day and coordinate the day's activities. This is called "Officer's Call". Department heads form in one area with the XO. Division officers muster with their division in a designated area for the same purpose. When the department heads are finished at Officer's Call, they go to quarters and disseminate appropriate information to their division officers and CPOs, who then brief their troops. Quarters procedures vary widely according to the preferences of the CO and XO, so be sure you are briefed by whomever you are relieving.

It is often better for you to come back from O-call and brief your khakis (chiefs) and let them brief the troops. It is important to keep your corpsmen as informed as possible, but it is better to have your CPOs doing this. It is their role. You should address the department periodically, e.g., for inspections, to give them good news, bad news, etc. Also make sure that the Plan of the Day is read and posted daily and that you get a copy of it. What is put in the POD is the same as an order, and you and your people need to know what is printed.

Eight o'clock reports occur every evening. Underway, department heads give their reports to the XO; in port, duty department heads report to the Command Duty Officer. The CDO is the designated officer responsible for the safety and management of the ship and crew in the CO's absence. If you are a department head, your reporting responsibility is to be present at the assigned place, stand at attention, and report, "Medical Department all secure, Sir/Ma'am," while saluting. If all is not well in the material condition of your department, you should briefly describe any discrepancies. The XO will indicate your next course of action. Most ships also have you submit this as

a written report that lists any material condition discrepancies and significant events of the day. These eight o'clock reports are submitted to the CO through the XO or CDO.

PB4T is scheduled weekly and is usually one to two hours. This is a very detailed meeting where the ship's daily schedule is planned for the next one to two weeks. Inspections, training evolutions, drills, shipboard training, and just about anything that may impact the ship are discussed and scheduled. You need to be a part of this, because you do have plenty of training and several required evolutions that must be conducted. Also, Medical is involved in almost every departmental inspection on board the ship, and you need to know when they are occurring so that you can properly plan for them. The ship's quarterly and annual schedules are promulgated, and it helps to know what is coming down the stream so you are not caught unprepared. As they say, "forewarned is forearmed."

A good piece of advice for when you first start attending any of these meetings is to write everything down, no matter how trivial it sounds. If you're not sure what the acronym is, write it down as best you can phonetically. Then take all this information back to your division and ask your division officer or chief to help you translate it. As you learn more of the system, you can ignore stuff that obviously doesn't apply, but at first, it's better to have too much than to miss an important evolution. You must avoid having to stamp out brush fires that can be averted. You have too much to do.

CHAIN OF COMMAND

A bit of philosophy about your role as a department head. As a very junior department head (both in rank and experience), you may feel unsure and slightly intimidated by more senior department heads at first. You must work hard to get over this as quickly as possible or Medical will be railroaded by every other department. You must be able to stand your ground to get your department's share of training time, manpower, money, and other necessary resources. Do not be intimidated by larger and more senior departments into relinquishing your resources without a fight.

This is where the art of politics comes into play. You are a small department in numbers but large in responsibilities, and you need the support and goodwill of the other departments to successfully accomplish your job. Learn your job and the applicable instructions as soon as possible. That way you can use the system to accomplish what you need. At times it may seem like an uphill struggle and a never-ending battle to get even the simplest task accomplished (like completing one training drill). You must be able to quote instruction requirements and to be flexible (a key factor) and to compromise when necessary. You must also be able to walk the fine line of demonstrating that Medical is in a support position on the ship—that you are there to "serve" the medical needs of the other departments (usually at their convenience) but not to be their doormat. If you can accomplish all of the above, you will not only have little trouble meeting all the ship's medical needs as well as your department's requirements, but you will also be prepared for a subsequent career in politics.

The bottom line is you must work for and defend your place in the pecking order and not take anything for granted. Medical is not the most important department on the ship (unless you are on a hospital ship), nor are they the least important (unless you allow that to happen). Medical falls somewhere in between the extremes and will coexist very

nicely with the other departments (even those with more senior department heads), provided you learn how to play well with others and share with everyone.

Up the chain of command, you report to the XO for administrative matters. The XO is usually the “tough guy” on the ship, with the responsibility to make sure things run smoothly and to carry out the Captain’s orders. For medical matters, you report directly to the CO. For political survival, any medical/administrative matter that you tell the CO (unless the CO directs you otherwise), you should tell the XO first; or if it’s urgent and you can’t find the XO, tell the CO and inform the XO as soon as you can. Nothing will get you in hack faster than not keeping the XO fully informed especially of what you tell the CO. No one likes to look foolish in front of the boss. **A Golden Rule: “The CO and XO NEVER like surprises.”** Also, even if you consider something hot, the XO or CO may consider it lukewarm or cool. Don’t be put off by this. They may have much hotter items on their plates, but yours is remembered. They usually ask you for an update several days later, when said item is now cool for you.

Having a sense of humor and learning how to be flexible are extremely important qualities. Even though schedules are planned in great detail, they are always planned in pencil because they change from moment to moment. No, it is not a conspiracy to drive you crazy; it is simply a fact of life in the operational Navy. As world situations change overnight, so does your ship’s mission, and you must learn to adapt to it. Don’t worry about things you have no control over, just go with the flow.

For obvious reasons, establishment of a good rapport with the XO will make your life much easier! The XO can also be your key ally for getting your program requirements accomplished. If the XO wants it done, it usually gets done. This is the route to take if the department heads stonewall you. Don’t start with the XO, however, or this will defeat your plan. Your peers (department heads) will be put off by the fact that you didn’t trust them or use the system properly. Identify the chain of command and always try to use that chain of command, both up and down. It is a tool the military uses for disseminating information, orders, and responsibility in an orderly and sensible fashion.

Within your department you will have two chains of command, a medical one and a military/administrative one. For the medical one, your people will be able to come to you directly with medical problems related to patient care rather than go through someone else. However, for military and administrative matters they will need to go through the formal chain of command, i.e., LPO, CPO, DIVO, YOU. This is necessary for good order and discipline. You should not be the first person seeing their leave or special request chits, etc. Your enlisted leadership should be handling that, with you giving the final approving authority in most cases.

Each ship has its own policy on final approving authority on chits and correspondence. You will have to find out what it is when you get to your ship. But a common rule of thumb is that the Captain is the only one who can disapprove a chit. If you don’t think someone should get something, recommend disapproval and state why, but you must forward it up the chain of command. **No matter how minor you may think it is, it is important to the person who requested it, and you must give it the respect due.** Most of the time you will be the final approving signature on enlisted regular leave chits, 24-hour liberty, and routine departmental matters.

Parallel to every official chain of command is a “ghost” chain. This chain is based on special personal qualities, talents, and abilities that are helpful to the good order of the organization. Your skills as a Medical Officer place you in a specific and enviable position in this “command.” Among the officers and crew of the ship, only you have direct and personal access to the highest as well as the lowest rating. Your position sets you apart from the day-to-day mechanical running of the ship. Your counsel is sought regarding medical, moral, social, recreational, and a plethora of other human-related problems. In most cases, to no other officer will the lowest ranking seaman reveal personal issues with such candor. No other officer would dream of speaking directly to the Captain on issues of importance not amenable to the chain of command.

BUT: As quickly as you are ensconced in this valuable niche, indiscretion can cause it to be lost. Any suggestion that you are unnecessarily violating confidences will destroy your credibility, both as an officer and as a physician. Bypassing others in the chain of command, whatever the issue, always raises the possibility of making big waves. Unfortunately, new physicians aboard ship tend to mention things in meetings that are better held in confidence. When in doubt, remember this valuable mantra, and say it silently to yourself frequently: “shut up, shut up, shut up, shut up...” It will often help.

CONFIDENTIALITY

Your patients basically have none with you. If the Captain wants to know anything that a patient told you, you must reveal it. Also if your patient tells you something illegal or dangerous, e.g., about drug use, homosexuality, suicidal or homicidal ideations, etc., you are required to report it to the XO and CO. This is very different from the civilian world. In the Navy, only the lawyers and the chaplain have confidentiality. It is best to be frank with your patients and let them know up front that you cannot maintain confidentiality. There are some cases you should refer initially to the chaplain (with whom you should maintain a close working relationship).

It’s also a good idea to discuss with the patient’s department head whether there might be personal or work-related problems that are having a medical effect. Working with the chain of command as an ally for your patient can achieve remarkable results. You can help pick up the people that might otherwise slip through the cracks. Again, these situations require discretion. But, if there is information of a potentially damaging nature to the member that you are telling the department head, XO, or CO, you should notify the member you are doing so. If you become known as a “backstabber,” you will never be trusted by the crew, and you will be less effective.

On the flip side, your fellow officers can give you some very good insight into your patients by telling you things they didn’t volunteer or think important. The whole point is to work with the chain of command as a team to achieve the best results with the least amount of trauma. But again, tread lightly and test the waters before you jump in.

OTHER LEADERSHIP ISSUES

Personnel who look to you for help and guidance may place grievances, family problems, marital discord, financial troubles, and even trouble with the law on your doorstep. It is likely that you will feel uncomfortable with some of the social burdens.

However unqualified you feel, remember there is no one more qualified, at least in the immediate vicinity, and there is no one else your patient has more faith in, or he or she wouldn't have come to you in the first place. On shore, there are resources you can depend on for help, referral, and other assistance where required. The Chaplain's Office, the Navy Relief Society, the Legal Office, local Family Service Centers, etc., are valuable sources of aid. Any problem you can't handle alone should be referred, but with a little time and human concern on your part, most problems either dissolve or become solvable.

Chapter 6, NAVAL OFFICERSHIP (THAT'S YOU)

Physicians reporting aboard are usually just out of their internship. As a result, few have had experience running a department or managing personnel. Certainly, none have had the experience of line officers of similar rank. Also, too often, the isolation of a hospital makes a physician feel that being a Navy doc is no different from that of an employee of Westinghouse, and that only the uniform is different. There is a difference, though, and while you are at a disadvantage, you can catch up. Your fellow department heads and/or division officers do realize this, as do the XO and CO, and they will make allowances initially for your mistakes. This will give you a chance to get settled and learn the ropes. As long as you keep your eyes and ears open, ask questions in an appropriate setting, and are eager to learn, you will not have too much of a problem.

While moving out of your office in preparation to change duty stations, you probably came across your commission packed away in the bottom of a drawer, or perhaps, framed in an initial rush of patriotic fervor when you received it. The wording on the commission reads: "Reposing special trust and confidence in the patriotism, valor, fidelity and abilities... I do appoint...by and with the advice and consent of the Senate..." The key phrase here is SPECIAL TRUST AND CONFIDENCE.

As a Naval Officer aboard a ship of the line you will be seen as more than a physician, more than a manager, you will be an officer. You will be thrust into a position of authority as a department head or division officer and will be expected to perform a stellar job as both department head and Medical Officer, despite lack of prior experience in either. You will be judged (harshly if you fail) by other officers, chief petty officers, and enlisted personnel aboard. The standards for a Naval Officer are high.

Initially it may seem overwhelming, and it can be if you are disorganized or lack personal assertiveness to prevent being run over. The first rule of survival aboard ship is "when in Rome," and we all know what to do there. We have already discussed etiquette and a few of the little tricks, which will allow you to feel like a part of the group. It will now be essential to follow that up with an assertive program to establish proper working relationships with your co-workers.

COMMAND RELATIONSHIPS

With senior officers, you must practice skillful "followership." You cannot choose your immediate superior, yet you must follow the guidance they offer. While your social relationship with them is variable and, in fact, may be quite close, you will be obligated to carry out commands as directed. Some senior officers do not give clear, concise, precise orders but suggest that "such and such would be a good thing to have done." Hint: view this "suggestion" as an order. They will. Others, at the opposite end of the spectrum, may be very authoritarian or even dictatorial. You will have to learn how each officer asserts authority and act accordingly. This should not be too hard, since you have already been doing this with your residents and attending staff. You find out their style and what they want and you give it to them. No difference on a ship. Maximum flexibility is still a major key to success (or survival), as is a sense of humor.

There will undoubtedly be times when you disagree with an order. If your disagreement is on a non-medical issue, do not fight it. Do it as ordered and, if it doesn't work, bring up your suggestions later. There are generally explicit regulations covering every aspect of shipboard life. Chances are good that what you disagree with is defined in excruciating detail in an instruction. If you ask in a nice, non-threatening way where you can find out more information about the subject, probably you will be given the instruction number to look it up yourself. There are some very good reasons why things are done a certain way, but until you have been on board awhile, you will simply have to accept some things on faith even if you don't like it. Some battles are not worth fighting, and you risk losing credibility and not being seen as a team player—a fatal mistake. The SORM and Navy Regulations are required reading for all officers and can answer a lot of your admin and procedural questions.

If it is a difference over medical matters, and your superior is not a Medical Officer, use your common sense. The superior officer has the hammer and is the boss. Nevertheless, a reasonable proposal, brought forward in a modest and simple manner, has a better chance of convincing than does shouting match or a petulant argument. Note that you can do your point of view a tremendous favor by staffing your argument well. A well-structured proposal, preferably in print (a point paper/discussion paper, see examples in the *Guide to Naval Writing*), with guidelines for implementation, will take a big load off your senior's back and may sway the argument your way.

If a difference of opinion over a medical matter is irreconcilable, your conscience must be your guide. Try to remember that the CO has more than the medical aspects to consider. It may be that non-medical factors play a bigger role in the decision than you can see. Remember that 99.9% of the time the CO will take your medical recommendations as offered. The CO knows that, if the decision is wrong, command of the ship might be on the line, so the safest course will usually be very conservative in medical matters and the CO will rely on your expertise. For that 0.1% of the time the CO doesn't take your recommendations, it's usually because there are real limits you can't see (e.g., there are places in the Pacific that, unless you are with a battle group, you can't MEDEVAC a patient for several days, no matter how sick they are).

If, after all consideration, you receive orders that you absolutely cannot comply with, your only recourse when you are at sea is to write your objections in the Medical Department daily journal for the record. You **MUST** follow the CO's orders or risk being arrested for disobeying a direct order. In port, you can request Admiral's Mast, by sending a request through your CO. The seriousness of taking such step cannot be overestimated. Don't smash a fly with a sledgehammer. Even though it is true that "Chicken Little only has to be right once," you do not want to be known as the "Chicken Little" of the ship. The consequences, even if you are right, can be very serious for you. This is not a step to be undertaken lightly, and always seek out the advice of a Navy lawyer, to see what other alternatives are available. The system usually works; use it.

TOTAL QUALITY LEADERSHIP (or SUBORDINATE RELATIONSHIPS)

Relationships between peers and subordinates should follow the same pattern you would like for your relationships with your superior officers. All of us are in the same boat—trying to do as good a job as we can and only in over our heads from time to time. Take the time to hear what others say to you. Don't look into a point of view with such

rigidity that you will not allow yourself to see the facts. **Always try to get both sides of the story**, and get as complete a story as possible. This will save much heartache later. Somehow, early in our careers, many develop the idea that a good manager is a whip-swinging Simon Legree who makes subordinates toe the mark and put in a “full day’s work for a full day’s pay.” Your subordinates are a cadre of young professionals who wish little more than to please their reporting seniors. You will find, mostly through experience, that a good manager is an individual who obtains the most productivity from the available personnel. In the long run, that productivity is better enhanced with the carrot than the stick. While a variety of reprimands and punitive measures will be appropriate from time to time, these occasions will be in the minority.

Here are a few of the management principles we have learned from **GOOD MANAGERS ABOVE US**:

1. Never set your own standards of right and wrong.
2. Never expect uniformity of opinions.
3. Do make allowances for inexperience or particular weaknesses.
4. You can give in to a subordinate, especially on unimportant issues.
5. Help others, even if it achieves no immediate purpose for you.
6. Once you have judged someone, be flexible enough to change your mind.
7. And for heaven’s sake, **BE CONSISTENT**.

We have all worked for managers who are arbitrary, shortsighted, and anti-motivational, mostly without permanent harm. All managers also make mistakes or use poor judgment, especially early in their careers. But fortunately our subordinates usually forgive us in time, and no permanent damage is done. However, if you don’t follow the above rules carefully, you will probably either totally demoralize your division in record time, or find yourself in a small boat without oars, never knowing exactly what happened to you.

Good management is actually much easier than bad. Total Quality Leadership (TQL) is the Navy’s approach to the management/leadership issue. TQL is based on principles and methodologies espoused by W. Edward Deming, an American statistician, who is credited with guiding Japan’s economic recovery after WWII. Deming’s approach emphasizes leadership responsibility and integrates process improvement methods with new methods for leading people. TQL is a common sense approach to achieving continual improvement, the best affordable mix of forces and capabilities, enhanced mission effectiveness and productivity, increased job and customer satisfaction, and a job done right the first time. TQL management principles have been used by the Japanese with phenomenal results. TQL and other management and leadership philosophies may be unfamiliar to new Medical Officers coming from training, but they can help you function as a manager in the Navy organization.

Good leadership requires training, for you and the people who work for you. You and your people should try to attend one or more of the Navy’s leadership and management training courses (LMET) (more in Training). Very few of us are natural leaders, but everyone can learn good leadership and management principles.

There are a few basic rules to running a section or division successfully. These allow you to achieve all the objectives of the organization while simultaneously developing your personnel.

SET CLEAR AND CONCISE GOALS. Early in the course of your relationships, let each individual know exactly what job you expect from them and to what standards you expect them to perform. It is much easier for them to please you if they know what is expected. You would not turn a football team loose without telling them where the end zone was, nor would you work with a basketball team on which only the coach knows where the rim is. When individuals don't know their goals, successful achievement of those goals becomes a random event and NOT statistically significant.

WHEN SOMEONE DOES A GOOD JOB, MAKE SURE THAT YOU ARE FIRST IN LINE TO MAKE IT PUBLIC. Public praise from you is always welcome. A simple word of praise, a pat on the back, a 24-hour liberty, or a letter of commendation for a job well done (an "attaboy" in Navy jargon) is a good investment. Chances are, that individual is going to go back and do an even better job next time.

A quick word about medals is appropriate here. Your people do NOT have to storm a machine-gun nest and take eight slugs in the gut to earn medals, although you would think that true by looking at the chests of some Medical Corps officers (it is not uncommon for a Captain to retire after 20 years with nothing more than a geedunk ribbon.) When someone does an outstanding job, submit them for official recognition. You are not allowed to give money, so give a medal. A medal is a substantial stroke and will help your people in several ways. Your boss should take care of you; it is your job to take care of your people. Even if you can't submit them for a Navy Achievement Medal, at least submit them for a Flag Letter of Commendation; it is worth one point on their advancement exams, and it is reasonably easy to get approved.

The Captain will be authorized to locally award Navy Achievement Medals (NAMs) without higher approval. If the Captain has used his/her quota of NAMs, and they are still deserving of the award, it can be sent to the next higher level for approval. Your CO's boss has many more medals that he/she can award. Navy Commendation Medals may be given to personnel who perform at either sustained outstanding levels, or achieved a specific goal in a highly exemplary manner. While usually reserved for personnel as they rotate from a job, those as well as NAMs may be given following an outstanding performance of some task. Chances are somewhere in your division you will have a Petty Officer or officer whose productivity is so consistently high that they deserve a medal. Don't be bashful about writing these; there are "go-bys" available to give you an idea of content and format. If you don't put your own people in for awards, NOBODY else will.

WHEN A REPRIMAND IS NEEDED, REPRIMAND THE ACTION, NOT THE PERSON. And do it immediately. You don't need to reprimand the individual, demean a sense of self-worth, or attack on a personal basis. It is easy to convey the message that the disapproval is for an inappropriate or wrong action if transgressions are not allowed to accumulate. Many managers hate such confrontations and allow problems to add up until a blow-up occurs, and the ensuing confrontation causes more problems than it solves. An ounce of early confrontation will save at least a pound of hard feelings, resentment, etc., later.

When reprimanding or counseling an individual, always try to do it in private. You don't like being chewed out in front of your peers; your people don't like it either and deserve the same consideration. It is also important to document such counseling sessions on a counseling sheet (see what form your ship uses) that is kept in the division officer's

notebook. That way, if the person continues to exhibit substandard performance despite repeated counseling sessions, **this written record will substantiate any further action you may need to take, i.e., letters of instruction, lowering evaluation marks, removal of NEC, etc. You need proper documentation to substantiate these claims as well as to protect both yourself and the individual.**

Always attempt to be consistent and fair with your counseling. Sometimes there are valid reasons for not completely following the rules, and they need to be looked at on an individual basis. There are always exceptions to the rule, but you should try to enforce the rules uniformly and fairly. While your troops may not always like the rules, if they see them applied uniformly, they will accept the situation far better than rules that are enforced sporadically. If your troops ever get the hint that some are getting preferential treatment, you are in for major trouble that will take a lot of effort to overcome.

For every job assigned to your department or division, there must be some person responsible for that specific job. Always BE SPECIFIC when assigning responsibilities. Don't put out at quarters that you want the x-ray machine broken down and cleaned. Make sure that it is assigned specifically to someone or give the list to your LPO for assignments.

No specific responsibility should be assigned to more than one individual at a time. Someone always has to be "in charge." This goes hand in hand with the above item. The more people you assign to a job, the less likely it is to be done. This may seem like a paradox but since everybody is given the responsibility, each will assume the next guy is going to do it. Narrowing that responsibility increases the likelihood that the job will be done and done correctly.

Each person in the chain of command should know to whom they report and who reports to them. Every person, from a seaman recruit all the way to the Captain, should know where they fit in this chain.

Authority and accountability must match responsibility. An individual in a position of leadership must be given leeway to perform the assigned job and must be accountable for the decisions made. A prime example, of course, is the Captain, who has total accountability and responsibility for the ship and all the people aboard. This same type of responsibility filters down through the chain of command. A person responsible for a job should have the authority and means to get that job done. This is a primary way to develop leadership and responsibility.

Do not have too many people reporting to one leader. In the shipboard chain of command, executive officers always seem to have quite a few people report directly to them. This is not a good management principle, but thankfully it is the XO's problem. Within your department, make sure that people report in a pyramidal fashion instead of everyone reporting to one person. For example, if your HM3 has a task assigned, the HM3 should report to the HM2 who, in turn, will report to the Leading Petty Officer (LPO). Don't have all your corpsmen report directly to the LPO or chief (unless the LPO is, at least, a chief and wants it that way).

The bottom line is that the secrets of good management are common sense, consistency, and clarity—rather like good parenting. In fact, exactly like good parenting. The above points are discussed in greater depth in "The One Minute Manager" and the

Division Officer's Guide (DOG). The DOG is a good reference book; leaf through it for more specific information. In all likelihood, the person just below you in the chain of command is a Chief Petty Officer or, on larger ships, an Ensign, Medical Service Corps (MSC) officer. While you may have one or two physicians of equal or near rank working under you, most of your administrative responsibility will be management of the Chief's or MSC's activities. Under the Chief or MSC, hospital corpsmen serve in a varied assortment of staff jobs.

The MSC officer, if you have one, will be the division officer. The MSC might be a brand new ensign, fresh from OIS, or a mustang (prior service enlisted) with many years of experience. If you have the former, it may be the blind leading the blind and you should both plan to LEARN the DOG (unless the "new" ensign has been on board more than six months). If the MSC is prior service, you're probably in far better shape, but keep your eyes and ears open. (See Division Officer section.)

The Chief is the most experienced and valuable person in your department. Although junior to you in rank, any chief is senior to you in experience, maturity, and dealing with people. You should recognize and utilize those attributes to the utmost. A chief can be invaluable during both initial orientation to the department and in the day-to-day operations of the department.

Senior petty officers traditionally complain that junior officers usurp their duties. As much as your chief can help you, almost any chief can also sink you like a rock. Be careful not to overstep your responsibilities and take over the details of supervision, which they usually handle very well. By stripping away a chief's authority, you can easily force a stereotype—the chief retiring to the CPO mess to drink coffee—before you realize what you have done. Get to know your chiefs well, understanding the personal capabilities, background, and experience that go into becoming a chief. And afford your chiefs the same special "trust and confidence" that your seniors expect from you. This is NOT fraternization. More on that later. Allow your chiefs to do the appropriate job, but check references, ask questions, and be skeptical. A good chief will respect your desire to learn and accept your leadership.

That said, it is also important to remember that you are the one in charge and, more importantly, the one who is responsible and will be held accountable for what occurs within your department. You must keep yourself well informed of what is happening within your department. After all, when the CO or XO has a question about something in Medical, they will ask you—not the chief. You will look like you are on top of things if you can answer them on the spot rather than having to ask the chief and getting back to them. That said, **NEVER make up information to give the XO or CO**. If you don't know the answer, say so and immediately follow with, "I'll find out and get right back to you, sir/ma'am," and go and do just that. If you give out false or made-up information, you are sunk. It's not worth even trying it.

Have regular staff meetings with your senior enlisted personnel to discuss the status of various programs and people and to plan for future events. Always keep a mental or written list of outstanding items, and make sure you have regular progress reports on them. It's the little things that reach out and bite you. You will enhance your credibility and increase your peace of mind if you have a good handle on what your department is doing. You may need to do spot checks of various programs to see if the information you are being given is correct and accurate.

At times, it can be difficult to deal with special requests, especially from your chiefs. As senior enlisted personnel with over ten years of service, chiefs may occasionally take liberties. Remember, they still work for you; you can't let them become independent operators. That doesn't mean you can't allow them an occasional afternoon off, but both of you must make sure all work is done or that it will be taken care of before they are allowed to leave.

FRATERNIZATION

You will undoubtedly find that officer/enlisted relationships are much more casual and personal in a hospital than they are in the shipboard environment. It may have been your habit in the hospital to address your fellow workers, nurses, corpsmen, etc., by their first names. If so, the close daily working relationship with your shipboard staff would tend to make you feel most comfortable with that same informality. However, traditions of the ship and line Navy run directly counter to that practice. While friendly, first name relationships might have set the tone you wished to have in your clinic, this will certainly be frowned upon on board ship.

While on board the ship, address your enlisted personnel by their rank and insist they address you the same way. No other officer is on a first name basis with enlisted personnel, and yours will be confused in their interactions with other officers if you establish that precedent.

The distance between enlisted and officer ranks in the line Navy are maintained by formality. By utilizing informal address you may, in the minds of some enlisted personnel, be closing that gap, and their respect towards you can deteriorate. The risk of their becoming over-familiar or insubordinate is high. Such an unintended change in shipboard relationships can be bad for good order and morale.

Therefore, the best advice is: don't call your people by their first names. It puts them in a difficult situation, and most of them will not understand quite what you mean by it. Also, they must transition from the more informal hospital atmosphere to the more formal shipboard line atmosphere, and you will help them in that transition if you err on the side of more formality rather than less.

Fraternization is a big concern in the Navy, and you must guard against being overly familiar with your people. Obviously, dating an enlisted person is illegal, but so is just "hanging out" on the weekends with your chief. See how your command handles the "gray" areas, and act accordingly. Your command may want you to only socialize with your troops at approved division or ship's functions. Do not go against your command's or the Navy's policy.

GOOD ORDER AND DISCIPLINE

Discipline is important in running any department, whether civilian or military. There are rules and regulations that a sailor needs to obey but sometimes breaks. Everyone makes mistakes. Everyone must also learn that there is a price to pay.

Minor infractions can be dealt with at local department levels with counseling and extra military instruction (EMI). This should be done through the chief or LPO of the division. More serious infractions usually result in a report chit being filed by the accusing authority. Reports are routed through the Master at Arms to the XO. The XO investigates the infraction and either dismisses the case, awards punishment (usually in the form of EMI), or forwards it to the CO for Captain's Mast. The Commanding Officer has non-judicial punishment authority over the crew. The CO hears the case and makes a judgment. More severe cases receive court martial hearings.

A note on EMI. EMI is not intended to be punishment *per se*, but extra instruction or training to correct a particular deficiency; it can only be imposed for certain lengths of time. A division officer can generally impose 5 hours, a department head, 10 hours, and the XO, 20 hours. These occur in two-hour blocks and after regular working hours and not on weekends or holidays (usual times are from 1800 to 2000). EMI is also terminated once the particular deficiency is corrected. For example, if an HN has not completed Damage Control-2 training within 6 months, EMI may be assigned. EMI will be stopped when the HN is DC-2 qualified or when the assigned number of hours is completed. EMI can be a very effective tool when used properly and creatively.

As Medical Officer, you will attend Captain's Mast proceedings to comment on medical problems that may have a bearing on the case. If you must attend as department head or division officer of an accused individual, you will be asked to give an assessment of the individual's work habits and overall performance to aid the Captain in the decision. You should always try to find something good to say about one of your people unless you see no redeeming values at all. At which point you should recommend having their caduceus removed and perhaps having the subject administratively separated for the good of the Navy.

Court martial punishment may include being sent to the brig and being discharged. Punishment of "hard labor" or "bread and water" in connection with the sentence also may be awarded.

In general, corpsmen are not known to be discipline problems, but there are exceptions. You need to be prepared to deal with them. The biggest mistake you can make is to be "Mr. Nice Guy". Don't be afraid to set down rules and guidelines, and stick to them. As said before, you can always soften up later, but you can't do the reverse. The situation is exactly the same as when you had a new teacher in high school. The class will test the teacher and the teacher must pass the test to be effective in class.

Many of these points may seem elementary, but be assured these situations are real and have created headaches for Medical Officers in the past. Medical officers tend to lean towards being "Mr. Nice Guy" too much. You should not be a tyrant, just be firm. Likewise, on the flip side of the coin, "Mr. Hard Guy" is a bad route to take. The manager who allows no input from subordinates and rules by fear will not go far. This management style may work for a while, but it eventually destroys morale and creates hostility within the department. Efforts to "get even" do not need to be open or overt. Covert disruptions *via* designed neglect can sink you just as fast as open warfare. Sooner or later your department will fall apart, and you will never quite know how you got into so much trouble.

Chapter 7, MEDICAL OFFICER RESPONSIBILITIES

MEDICAL GUARDSHIP ASSIGNMENT

When in certain ports, there will be days your ship will be designated “medical guardship”. You are required to be present from 0800 to 1600 on that day to care for surrounding ships’ personnel who do not have Medical Officers aboard. Ships with independent duty corpsmen (IDCs) are to use available Medical Officers at the pier whenever possible before sending referral patients or physical examinations to local clinics. When you have guardship, expect to see patients from other ships; be as accommodating as possible. The IDCs need all the help they can get. If you think your job is tough, remember you’ve had four years of medical school plus internship; the IDCs have one year of training. Don’t be out playing golf on the day you have guardship assignment!

When in a foreign port, medical guardship sometimes means staying on board at all times. Don’t go on liberty when you are in a foreign port if there is no other place to take sick or injured crewmen. You have a responsibility to the Captain and the crew as ship’s doctor. You are it!

Remind your corpsmen that if a crewmember returns from liberty in a stupor or unconscious, don’t take them below to sickbay, take them to the nearest “good” hospital available. Dragging bodies between decks is no fun, is time-consuming, and can be a hazard for your patient and the corpsmen. This is different from a drunk watch, where the individual needs to sleep off too good a time. Once Medical has cleared the individual, someone from their division watches to make sure they don’t hurt themselves in their sleep (people have died by aspirating their vomit while drunk). Note: the “drunk watch” is the responsibility of the division that owns the drunkee. It is NOT a Medical problem once you ensure there is no other medical issue.

You usually will travel with other ships that will have a Medical Officer. This makes medical guardship easier, because you won’t have duty every day. If you have guardship, you may still be able to go on liberty, but only to a place where you can be quickly reached. Let the Captain and the XO know where you can be found for an emergency, and stick to your schedule! Stay as close to the ship as possible, and don’t take any wilderness hikes.

PHYSICAL EXAMINATIONS

A large part of your onboard medical practice will be conducting routine physical examinations. Physicals performed most frequently are: discharge, reenlistment, extension, light duty, retirement, and routine q5-year physicals. Requirements are slightly different for each examination. Other specific physicals will be covered in the appropriate sections.

All personnel must have a physical prior to age 25. Between 25 and 50, they need a complete physical exam every 5 years. After age 50, it is every 2 years; after age 60 it is annually. This includes radiation physicals, which has greatly simplified physicals for all Medical Officers. Aviation physicals are still annual and must be done by a flight

surgeon. Dive physicals at this writing are every three years at specific ages, and if you aren't a diving Medical Officer, you must send them to Washington for final approval (see the Manual of the Medical Department, MANMED, for details). The easiest way to do physicals is by radiation health standards. These are the most stringent of all physicals and, if all your physicals are done that way, they will all be correct. Read MANMED Chap 15 and the Radiation Health Protection Manual (NAVMED P-5055) for all the details.

While all your corpsmen need to know the requirements for physical exams and how to process someone for them, it is very helpful and far more efficient to have one person in charge of physicals. If you have a radiation health program, have the radiation health technician be in charge of physicals. To simplify matters further, it helps to make up a cover sheet that lists the requirements for physicals, so the corpsmen can check them off as they are completed.

Requirements for all physicals include: completed SF-93 and SF-88 (history and physical), CBC, UA, RPR, blood typing (if not recorded in record), dental exam, visual acuity check, Falant test for color blindness, audiogram, PPD and HIV test within one year; females also must have a PAP smear within one year. Reenlistment and Q5-year physicals must have percent body fat recorded. Personnel over age 25 must have an EKG, fasting blood sugar, and lipid profile completed. Personnel over age 36 must have tonometry done (there are portable ones so that you can do them on board), as well as stool guaiacs. Separation physicals and diving physicals need a chest x-ray. The health record is to be verified at each physical and when the immunizations are updated.

Physicals should not be scheduled with you until everything is done and all the results are back. The new chemistry analyzers on all ships with Medical Officers will do all the lab work that you need. If you have the patient report to Medical at least one week prior to when they need the physical, you should have everything back in time. This way you can do the final review after you do the physical. It saves time and your corpsman can then administratively review the physical for accuracy.

The biggest headache is with officers' physicals and getting them to sickbay. For some reason, officers hate to have physical exams and will fight, kick, and scream to avoid them. Chiefs are only slightly more cooperative. Commanding Officers are especially notorious for avoiding their medical checks and exams, particularly their immunizations. You have to take the bull by the horns and go after them to get them done!

Exams should be done with great care; all body systems must be reviewed. If you sign your name on that form, and don't do your job, it will come back to haunt you. It is easy to fall into the "it's only routine" trap. On both the SF-88 and 93, if a person checks a 'yes' block or you note something abnormal (scars, tattoos, less than 20/20 vision), etc., you must comment on EACH abnormality or 'yes' answer and note whether it is CD (considered disqualifying) or NCD (not considered disqualifying). The vast majority of your answers will be NCD, but you must address each one (except for the yes to vision in both eyes, that is normal). If you find physical problems, refer to the MANMED to determine if they are disqualifying, then refer them to the appropriate specialist for treatment or a medical board.

Acquiring consultations with specialists is essential for problems or disqualifying attributes. The patient is to be referred to the next-higher chain in the medical system.

A Physical Evaluation Board (PEB) may be needed to determine if the subject can remain in the service. This is not your job. Yours is to do the initial physical exam, not disqualify an individual based on what you find.

No job is complete until the paperwork is done (says graffiti over a toilet). For most physicals the SF-88 (Medical History) is required. SF-93 (NAVMED 6120/1) is required for officer physical exams in lieu of a regular SF-93. Along with the required tests, always check immunization records and audiograms. Visual acuity and lens prescriptions are very important items, especially if a problem has been reported. Keep in mind that all hands are required to have two pairs of glasses on hand at all times. No matter how many POD notes you write or tell people, you will always get one or two whose only pair of glasses break during deployment. In short, thoroughly screen the health record to try to head off these problems. You will be amazed at how many little things had previously fallen through the cracks.

You should be able to do a physical exam from start to finish in less than twenty minutes and leave no stone unturned. Educate your corpsmen in patient preparation; the job will go faster and more efficiently. Efficiency is important when you start doing six to seven physical exams day, along with Sick Call and other collateral duties.

Try to save yourself the headache of eleven last-minute “emergency” separation or reenlistment physicals. Work with the chief in personnel and the ship’s career counselor. Ask them for a list of all personnel who will be separating, re-enlisting, or extending for two or more years (anything less than 24 months doesn’t need a PE) in the following month. Also check with the legal officer for anyone being processed for administrative separation. Usually once the paperwork comes through, the CO will want them gone that day. Armed with this list, you can seek out these people to have them start their physicals. Most do not come voluntarily, so this makes scheduling easier. You will find that with all your duties, your time will be at a premium.

When doing physicals for other ships, (and if you are on a tender you will do lots of them), have the IDC tell you how many physicals they need at the beginning of their availability, if it wasn’t on the message. That way you can schedule your time better and say when you want their people to come over to start their preliminary work. Most IDCs will volunteer to do the basic labs and forms. You may want them just to have the patient bring the health record and you do all the paperwork—you decide. The key is to be willing to do physicals for IDCs. This alone will earn you a friend for life, since one of the IDCs biggest headaches is getting routine physicals done. The branch clinics are notoriously busy. You have to look out for your fellow health care providers.

LAUNDRY / MESS SPECIALIST / BARBERS / FSA PHYSICALS

Personnel working in these areas all require annual physical examinations. The annual physical is recorded on a standard Form 600 and signed by the Medical Officer or Medical Department representative. No lab work is required unless specifically indicated after examination, but you should note their current PPD status. One copy should be placed in the health record and another in the training record. If you have a good tickler file system, your examinations will be up-to-date, and you should have no problem.

In addition, all FSAs require “physicals” prior to starting mess duties. This consists of the FSA reading a section from P-5010 about hygiene and medical conditions that preclude them from handling food. The corpsmen can brief them while they check their hands for cuts, their faces for active acne or sores, and for acute URIs or other disease, which keeps them from handling food until the condition resolves. This does not keep them from cleaning or working on the messdecks. In addition, note their current PPD status on the SF-600.

A word on special physicals. It will make your life a lot easier if you make up special SF-600s for each type of physical. You can and should make them up for all your special physicals (including occupational health PE’s) and screens. They should include a brief yes or no history section, what laboratory studies you want, and a physical section for you or the corpsman to complete. This will standardize all your special physicals and streamline your paperwork. (More on special PE’s in the occupational health section.)

BRIG AND CORRECTIONAL CUSTODY UNIT EXAMS

At times, members of the crew will be awarded confinement to the brig or correctional custody unit (CCU). You are required to examine and certify them as physically fit to stay in confinement.

The brig is jail. Servicemen are confined there for serious crimes (rape, murder, larceny, armed robbery, prolonged periods of unauthorized absence, etc.) and may stay there for extended periods of time (six months or greater). They are often awarded confinement and hard labor. If, during your examination, you note a physical limitation, be sure the brig personnel are aware of that limitation when assigning work details. Perhaps they may only be able to sit in a cell during confinement, but they will go.

Because a ship’s brig is not fit for human habitation for long periods of time, a 72-hour confinement limit is imposed. And a person confined to the brig may spend up to 72 hours eating nothing but bread and water. Most sailors can stand three days of bread and water without any problem. As a matter of fact, you will probably have sailors on board who could use a few days of bread and water. Nobody will starve to death during those three days.

If your ship has a brig, you are required to conduct Sick Call daily on persons confined. You can inspect the brig at that time for habitability. The brig on a ship is only used underway. In port, the nearest base brig is used.

The purpose of the brig physical examination is to look for medical problems that may need attention or that must be monitored during confinement. It is also to protect the individual’s rights and to make sure there is no abuse. If on physical examination, an individual has evidence of trauma, note that prior to his or her confinement. It is important to be extremely specific regarding descriptions of injuries and other problems.

On the SF-600 you must also document mental status, particularly any suicidal ideation. Someone has put the rumor out that if an individual is suicidal, they will not go to the brig or CCU. Tell them the truth before you ask them if they are suicidal. Tell them that if they are suicidal they will go to Psychiatry and stay there on the locked ward until they

are no longer suicidal, and then they will go to the brig. In addition, the time spent at Psychiatry does not reduce or in any way change the time awarded for the brig.

For females (there are some brigs and CCUs that take females), you must document that they have a negative pregnancy test as of that day. Once you have declared someone fit for the brig or the CCU, you must state that they are fit for duty, fit for confinement/bread and water/CCU, and fit to perform all activities (or note the limitations). If you don't write all of this, the patient and the chart will come back to you. In the absence of a Medical Officer, IDCs can do the initial confinement screen, but a Medical Officer must see them within 24 hours.

Crewmembers assigned confinement through Captain's Mast may be awarded the CCU as a rehabilitative measure. The CCU is not used as a mode of punishment under Article 15 (NJP). At the CCU, the crewmembers are rehabilitated by getting up each day at 0400 and working through until 2200 (4:00 am to 10:00 PM). They are given meals and rest periods throughout the day but no free time.

These crewmembers also undergo vigorous physical training during the day. If an individual has a physical limitation, or is unable to perform a particular motion or duty, CCU access will be denied. The individuals assigned there must be perfectly healthy and able to participate in all activities. Occasionally you may be pressured from above to get a crewmember swiftly processed to go to the CCU—don't allow that to happen. Don't make the mistake of sending an individual with a physical problem or limitation to the CCU with a clean bill of health.

If a crewmember is awarded time at the correctional unit, they should return to the command within thirty days. People being administratively processed for separation are not allowed assignment to the CCU purely as a punishment.

FITNESS FOR DUTY EXAMS

This is described in the GMO Manual and BUMEDINST 6120.20 series. Only the CO or a designated representative, e.g., the CDO, can order them. When ordered, find out why they want them. Usually it is because someone came to work intoxicated or had alcohol on their breath, and they want to use this exam against them at NJP. If that's all they want it for, they don't need a competency for duty exam. They can charge the individual for being drunk on duty if the supervisor smells alcohol on their breath, and they can send the person to their rack. If the supervisor wants a legal blood alcohol, then the individual must be read their rights by the MAA and consent to giving the blood sample, or there must be a warrant. If you are doing a blood alcohol because you think someone is drunk, or you just want to do one, you can draw the specimen, and it can be used at an NJP, but probably not at a court martial (you will have to talk to the lawyers to get all the fine points of legal evidence).

When doing competency for duty exams, always take a very conservative approach. If the individual in question does anything of importance—i.e., beyond punching tickets in the mess hall—and you think they MIGHT be under the influence of drugs or alcohol, put them in their rack in a down status until your screening tests come back or they have slept it off. Having someone lose a day of work is better than having them lose their life or someone else's.

The results of any fitness for duty exam are completed in triplicate on NAVMED 6120/1 form. One copy goes in the record, one to the patient, and one to your file. Make sure you do the exam by the numbers.

OVERSEAS SCREEN

Personnel assigned to overseas duty, as well as their dependents, must have an overseas screen done prior to transfer. This includes a command screen (to make sure that there are no legal, financial or social problems), and medical and dental screen (some duty stations are isolated and have limited medical and dental facilities). Personnel who require unusual resources (e.g., specialized medical care) are not supposed to be assigned overseas. It is very expensive to have to bring these people back early. OPNAVINST 1300.14A and NAVMEDCOMINST 1300.1C govern this program and have the appropriate forms the command will need, but your command already has the forms. You make up a special SF-600 for the medical record.

Read the instructions before you do an overseas screen. Basically, you have to do a history and a physical if theirs is not up to date. Immunizations should be up to date, and they must have an HIV test within six months. Any medical problem that may need treatment should be referred to the appropriate specialist. Ask the question, "Is the individual fit for overseas assignment?" This will be case by case and depend upon the duty station. If you are unsure whether or not a duty station can manage a particular medical problem, you must send them a message that describes the problem and receive a reply before recommending someone for overseas assignment. DO NOT do dependent screens (or dependent health care); you are not credentialed for this. Dependents must get their overseas screen at the nearest military facility.

MEDICAL PRACTICE

Your primary day-to-day duty is patient care, and you are responsible for maintaining the health of all crewmembers. Although the CO has ultimate responsibility, you are the ship's medical expert. Your decisions will be scrutinized more carefully than if you were working in a clinic or emergency room because of the close proximity to the rest of your crew. You are literally "on call" 24 hours a day when the ship is deployed.

At Sick Call, you'll be seeing approximately 20-50% orthopedic problems (both occupational and non-occupational injuries). The former can be knees and backs that have previous injury and have pain secondary to the steel decks and ladders on the ship. The non-work related injuries are usually sports or PT injuries, although motor vehicle accidents are still a big problem. 10-15% will be psychological problems (mostly personality disorders). Another 20% will be infectious disease, respiratory, diarrheas, STDs. 20% will be GYN (if your ship has women on board) and the other 20% or so will be a variety of ailments related to routine outpatient medicine. There will be adequate medical resources to take care of most ailments yourself, and you will have to refer or MEDEVAC (see MEDEVAC section) a very small percentage of cases.

Note: There are plenty of people who present with suicidal ideation, and you must take these threats seriously. Ask them the standard Psych questions. Most of them will tell

you honestly if they want to kill themselves. If they say the magic words, you **MUST** send them to Psych for an evaluation and let them clear the patient for duty. One successful suicide on a ship is one too many. Always send an escort with the patient all the way to Psychiatry. Give explicit instructions to escorts, and inform them of the reason an escort is required

Because of your ready availability, you may see patients with problems that normally wouldn't get taken to a doctor. Don't be surprised when you are bombarded with requests to remove warts, do vasectomies, or just answer "curbside consults." For many sailors, getting appointments at shore-based clinics for routine care is very difficult and frustrating. They would prefer to see you because you are right there and you are "their doc." Be accommodating when you can.

"House calls" should be kept to a minimum. Otherwise, you will be running all over the ship. Sick Bay is designed as your clinic. Use it as such. Keep regular Sick Call hours and post them so everyone knows when you are available. If you see people as a "curbside consultant," you will have poor documentation of health care, and you will never get through a meal without having to look at someone's tonsils or hear about their hemorrhoids. Have them come to the clinic, and everyone will be happier in the long run. The same holds true for wardroom members, who may try to see you, alone, in your cabin for medical problems. Have them come to your office.

There are exceptions. Go to the Captain's cabin when you suspect the CO is under the weather. It is courteous and shows respect for the position. The same holds for the XO. Consider yourself their personal physician!

Proper patient management begins at the time someone walks in the door until the time they are "cured". Patients are no different on ships than ashore. They deserve timely care, informed consent, follow-up, and proper referral for specialty care. One of the areas often overlooked is proper follow-up after admission to a shore-based hospital. Always stay in contact with the hospital to keep abreast of your patient's progress. If you check on your crewmember, that person will feel that someone really cares, and it also keeps you on top of things. Make sure you then brief the CO and XO on the patient's progress. They like to know too.

Visiting hospitalized patients does wonders for the patient and for you. The patients will love you for it, and your presence there will allow you to get to know people, physicians, nurses, lab techs, etc., who can help you out when you need to get things done. **Remember, it is not always what you know but how much you care that sticks in a patient's mind.** Your visit displays concern and makes patients feel like somebody really does care for them. This is especially true abroad, far away from home, when you are dealing with young, 18- or 19-year-old sailors who have never been away from their homes before. Caring never hurts.

On that subject, here's quick thought from your early medical school days: It is pretty easy to be a NICE doctor. It is very difficult to be a GOOD doctor. While you are busy caring about those crewmembers you've had to send off the ship, get smart about WHY they had to leave, and what you might do next time to know more about that subject. You're not held to peer-review standards during your tour aboard, so it's easy to get a little complacent. Work to overcome that.

SICK CALL

Set aside time every morning and afternoon for routine Sick Call. This gives the crew an opportunity to have acute problems taken care of, as well as to get seen for routine, non-emergent care. Hours should be fixed and well known to the crew. Do not allow Sick Call to get backed up or overrun by people looking for a break from work. If Sick Call gets too big, split it up so you can see more routine things later. The bottom line is to treat, refer, or reschedule in a manner that allows people to get back to work in a timely fashion. If you don't, your Sick Call can become a refuge for people looking to skate out of work.

One way to prevent this, especially if you have a big enough patient population, is to do Sick Call by appointment. Patients call in the morning and are given appointment times in 15-20 minute blocks and told to arrive 10 minutes prior to their appointment time in order to get their vital signs done. Emergencies are, of course, seen at any time. If you educate the crew ahead of time as to the philosophy and the proper procedures, it should be very well received. Patient waiting time is reduced, as is the number of people waiting for treatment.

If manpower and space allow, have your staff see more than one patient at a time. If you have three corpsmen running Sick Call, they should each see a patient. Unless a complex or emergency case comes in, the patient should not be examined by two or three corpsmen. Sick Call will run smoother and quicker if more than one patient is seen concurrently. It is also helpful if one person is doing vital signs and entering the patients into the Sick Call log prior to their being seen in Sick Call. They can also do some triaging there if time permits, (getting x-rays, moving someone to the front of the line for rehydration, etc.). When you report aboard, determine what you are comfortable allowing your corpsmen to do. Observe Sick Call to get a feel for how your corpsmen treat the patients. This will give you an idea of your role in daily Sick Call. You may elect to see all of the patients or to see only difficult cases.

At a minimum, Medical Officers should see:

1. All significant abdominal pain.
2. All chest pain.
3. Patients complaining of hematuria, hematemesis, hemoptysis, or hematochezia (the four Hs).
4. All hand and facial lacerations requiring sutures. You may allow your corpsmen to do the suturing, but see the patient first to evaluate the extent of injury.
5. Any patient requiring narcotics.
6. Any patient who specifically requests to see you should have access to you, but not before he or she is screened by the corpsman.
7. Immunization patients who have a history of allergic reactions to medications.
8. Patients with sustained high fever (>102).
9. Any patient referred by your corpsmen. This is a situation you can control to some extent. If you find yourself seeing every patient, then you need to educate your corpsmen. Teach them what they need to know and point out where they can look up additional information. Don't allow your corpsmen to get lazy or they'll end up referring hangnails to you.

The corpsmen should see:

1. Anyone who initially presents to Sick Call. This gets patients screened and keeps you from spending the day on routine problems.
2. Patients who need routine immunizations, PPDs, etc. The corps staff should be well versed on the necessary immunizations needed by service members to keep their record up to date.
3. Personnel reporting aboard. The corpsmen should screen their health record to identify deficiencies and problems.
4. Patients with routine indigestion, headache, upper respiratory infections, minor trauma, etc. An HM3 or above should be fully capable of screening and treating these common ailments.
5. Patients who need routine laboratory work, RPRs, urinalysis, CBCs done prior to having physical examinations. Depending on the corpsmen's level of training, you may allow them to order other studies such as throat culture, urinalysis, mono spots, etc., when appropriate. Most often you should be consulted and should always countersign the lab chit.

These are only guidelines, which you should modify to suit your particular situation. In general, you will see more patients and supervise your corpsmen more closely until you have been at your command long enough to know everybody and their capabilities. Always err on the conservative side. At times, you will be unsure of yourself. After having had someone looking over your shoulder for so long, it will take time to gain confidence in your own decisions as well as those of your corpsmen.

MEDICAL RECORDS

A patient's medical record is a legal document. Everyone at Sick Call, whether you see them or not, needs an entry made in their medical record. This is not just for medical-legal purposes. The chart is the only continuing record of medical care. People are transferred frequently, so if they go without proper documentation, they may undergo redundant tests at the next duty station to rule out a problem that has already been ruled out. Even details like how much of a medication was prescribed will help someone else trying to care for your patient. Write down the important facts, without writing a book.

A complete medical record is required on every crewmember and must be maintained according to BUMEDINST 6150.1 (this tells you the order of the forms within the record). At a minimum, each record must have a current physical, current immunizations, baseline audiogram, up-to-date problem summary sheet, medical surveillance questionnaire recorded on OPNAV 5100/15, signed Privacy Act statement, disclosure sheet, and blood type, sickle cell and G6PD test results.

In addition, all medical records must be verified annually, both to ensure that you have one for each individual as well as to make sure all information is current. Crewmembers must be reminded that medical records are the property of the US Government, not their personal property, and that you must maintain custody of their record, not them. You can tell and encourage them to make copies of everything in their records, if they're worried about it getting lost. When a patient loses a health record, **EVERYTHING** must be redone unless they have copies of tests. This includes shots. Remember: **if it's not written down, it didn't happen.**

DENTAL RECORDS

If your ship has a Dental Officer on board, skip this section. If not, read on. Dental records are maintained the same way medical records are. Everyone has a dental record, and you maintain them. All personnel are required to have an annual T-2 (a complete dental exam). Since most sailors like going to the dentist even less than they like getting shots, this can be a real struggle, and it requires determination on your part along with command help to achieve this goal.

Dental readiness is divided into four classifications. Class 1 is no dental disease and requires no treatment (you will almost NEVER see this classification). Class 2 is a mouth that has some minor dental disease but is not expected to cause any problem within the next 12 months. Class 3 means that there is dental disease expected to cause dental problems within the next 12 months. This can run the gamut from a filling to a root canal and major gum disease. Class 4 means no dental exam has been done within the last 12 months. Who knows what dental pathology lurks within these mouths? (Only the dentist knows for sure.) Class 3 and 4 dental patients are your biggest problem, since they can require emergency dental care and possible MEDEVAC.

To assist you in keeping up with the needed dental exams, the TYCOMs require a quarterly dental readiness report to the Force Dental Officer. This lists the number of dental patients within each classification as well as the number of dental emergencies requiring MEDEVAC for treatment. These numbers then allow you to determine your dental readiness by taking the number of Class 1 and 2 patients and dividing them by the total number of patients (the denominator should add up to the total number of crewmembers). This percentage is your dental readiness. Your dental readiness should be above 90%. If it falls below 80%, expect to receive the personal attention of the Force Dental Officer. Obviously, keeping track of when exams are due requires a good tickler. This can be combined with your shot tracker or any other tickler you have. (Using the birthday month is one system.)

To obtain the needed dental exams, there are many resources you can utilize. Shore-based dental commands are one area. Prior to a deployment, your ship's patients are given priority to correct as many dental problems as possible. But since everything else is a priority right before a deployment, getting the patient to a dental appointment can be difficult. Tenders and other ships with Dental Officers are usually within walking distance. When your ship has availability with the tender, Dental is one of the services available, so use it. These dentists are also available to give inservice to you and your corpsmen on how to maintain and read a dental record. (Hint, the dentist tells you in the SOAP note, if it was a T-2 exam, and what class the patient was.)

NARCOTICS AND PRESCRIPTION WRITING

This is an area that can get you into trouble so fast that you won't know what hit you. Safeguarding and carefully prescribing drugs is vitally important. Nothing will cast a shadow of doubt over you and your department more than incorrect prescription practices and inventories. With the Navy's war on drug abuse, anything out of the ordinary regarding controlled substances will put you behind the eight ball!

The system is quite simple. A bulk narcotic custodian (officer) is appointed by the command to be responsible for the management of all bulk controlled drug inventories. This person will be your MSC officer if you have one; if not, the CO must appoint an officer who does not have prescription-writing authority. A working stock custodian is also appointed in writing by the CO to dispense drugs from your working stock safe. Copies of both appointment letters are maintained in the medical departmental files. That custodian is usually the pharmacy tech (NEC 9482). Medications are transferred from bulk to working stock using a prescription blank, DD-1289, before they can be prescribed to a patient.

Keep the number of people with narcotics access to the absolute minimum. Only the Medical and Dental Officers may prescribe any controlled substance. On ships without Medical Officers, the senior Medical Department representative may prescribe narcotic medication in an emergency. As long as you are in charge, only you should have prescribing power.

The working stock should be kept in a safe if at all possible. A large cabinet with safety padlocks may suffice but is not recommended. Each month, the Controlled Substances Inventory Board (which must consist of at least two officers and a third member who can be an E-7 to E-9) makes an inventory of bulk and working stock supplies. The head of the board should be a 0-4 who is not a Dental or Supply Corps officer. This group must be appointed in writing by the current Commanding Officer. You must also maintain copies of all the appointing letters in your files.

The bulk narcotics custodian is to receive all narcotics and secure them in the bulk safe. Practicality dictates that, at times, the Medical Officer or senior Medical Department representative receives the bulk storage. Upon receipt, the bulk custodian should be notified immediately and arrangements made to secure storage in the safe. Do not leave narcotics out in the open! Try never to sign for receipt of narcotics if you can at all avoid it. You only want your name on the prescriptions you write. (More under Supply.)

Prescribing and dispensing drugs on board ship is different from doing it in a hospital. Without a trained group of pharmacists responsible for keeping medications safely secured, the Captain will consider the Medical Department to be the pharmacy. This puts a double burden on you; not only must you prescribe wisely, but dispensing must also be carefully controlled.

The following guidelines will help keep you out of hot water:

1. Never sign a blank prescription for anything. This is too tempting for even the most trustworthy young corpsman.
2. You must (by directive) sign, date, and either print or stamp your name and social security number on every prescription. **DO NOT FAIL TO DO THIS, PARTICULARLY ON A PRESCRIPTION FOR A NARCOTIC.** If you don't have a stamp with your name, rank, and social security number on it, get one. It is a good investment and will make your life a lot easier, especially since you have to do the same thing on the charts. For routine medications, prescribed by your corpsmen, their name, signed and printed, should appear on the prescription.
3. Never write yourself (or a family member), a prescription for a controlled substance. Have another Medical Officer or Dental Officer write you one if you need it. If there is no Dental Officer present, have the prescription countersigned by another officer. This is for your protection!

4. Always document in the patient's medical record what controlled drug you prescribed and how many were given. This protects you and the patient if some question arises as to the validity of controlled drug possession for that individual.
5. Periodically inventory your working stock to be sure there is enough of everything. You may not be able to immediately find the bulk custodian when you need something.
6. Always check the medical record of any patient who presents asking for a controlled medication refill.
7. When writing a prescription for a controlled substance, write out the quantity next to the number (that way they can't add any zeros to the number).
8. Make sure to tell the patient to destroy any controlled medicinals that they did not use for this illness and not to use an old narcotics prescription. They need a new prescription each time. If their urine is positive on a drug screen, they will probably be kicked out.

COMNAVSURFLANT/PACINST 6000.1 series has an excellent section regarding the use, storage, dispensing, and logging of prescriptions of controlled medicinals

PRESCRIBING MEDICAL TREATMENT

Most vessels with a Medical Officer on board will have a pharmacy technician. It is a good idea to have that tech in charge of all your medical stock (except controlled substances). They should maintain proper stock and order replacements. In some situations, they may serve as your supply petty officer, ordering all medical supplies. This will depend on the size of your ship and the number of personnel you treat.

Having your pharmacy technician responsible for filling all prescriptions sounds like a great idea, but this does not work in all situations. The tech may not always be readily available to fill prescriptions. Also, one person can't see patients and fill prescriptions at the same time. A better system is to train all the corpsmen in proper prescription procedures and to have your pharmacy technician oversee the operation. This is much more efficient in the long run.

What should a corpsman be able to prescribe at routine Sick Call? This will be up to you. Remember, however, that during the cold and flu season, you could spend all day writing prescriptions for Actifed, Drixoral, and Robitussin. Routine medicinal, non-controlled stock should be available for the corpsmen to dispense independently, provided they have done a proper work-up, documented the patient's condition, and provided for good follow-up.

There are certain medications that only you should prescribe. These include:

1. Any controlled substance, by law.
2. Systemic antibiotics.
3. Systemic steroids.
4. Any cardiovascular medications. This includes antihypertensive medications.
5. Any medications that need a precise, accurate, specific diagnosis. For example, Synthroid, INH, etc.
6. Any medication that has a known side effect that requires monitoring.
7. Oral contraceptives.

You probably get the picture—most prescriptions will ultimately require your signature. That is the way it should be. Medications for the common cold, constipation, uncomplicated diarrhea, wound dressing, motion sickness, and headaches associated with viral symptoms can usually be handled by your corpsmen. Read their entries to make sure they are prescribing appropriately and not in excess. Remember that waste eventually costs you OPTAR money.

You can also set up some drugs to be dispensed as pre-packs. Most patients know when they have a cold or headache that only needs OTC medications. Since you are the nearest drugstore and are free, they will come to you first. Depending on how your QA reviewer wants this documented, you can simply hand out pre-packs to those who ask, or you can take their vital signs first, log them in the Sick Call log, and just write a short not-observed SOAP note. This works well for ibuprofen, aspirin, acetaminophen, over-the-counter cold medicines, cough syrup, loperamide, and motion sickness prevention drugs.

INTRAVENOUS THERAPY

The physician must order all IV therapy. You can have in your standing orders for corpsmen to start an IV in an emergency situation as they are calling you. Trained corpsmen may be allowed to start and monitor an infusion, but only with written orders. The doctor should administer all IV medications. Exceptionally well-trained and experienced personnel may be given some of these responsibilities, but drugs with a known incidence of allergic or adverse reactions may cause problems even your best corpsman cannot handle. It is in the best interest of all for you to be there. Never allow them to administer IV push medications. Note: Most diarrheas can be handled with oral rehydration, but you may use IVs to give corpsmen practice in IV placement.

NON-MEDICINAL TREATMENT

Most non-medicinal treatment will be rendered by your corpsmen (dressings, hot packs, eye irrigations, whirlpools, etc.) and can be done without your direct supervision, but not without your direct order. The time dedicated to training and supervising your inexperienced corpsmen to do these procedures will pay off handsomely in productivity, as well as in their education and morale.

A few procedures should not be delegated. These include:

1. Suturing hand wounds and facial lacerations.
2. Reducing and casting fractures (non-displaced fractures can be casted by the corpsmen).
3. ELECTIVE surgical procedures.
4. Arthrocentesis of any joint.
5. Peripheral nerve blocks.

In the end, the procedures you delegate will depend on your capabilities and confidence in yourself, as well as your confidence in the maturity and abilities of your corpsmen. All bets are off in a true emergency when there is no time or opportunity to call in a specialist. When necessary for saving life or limb, just get the job done. Otherwise limit yourself and your staff to those procedures you know you can do well.

LABORATORY

Almost every ship with a Medical Officer will have laboratory facilities; the bigger the ship, the more capable the facility. The presence of a lab can be a blessing or a curse. A well run, efficient laboratory with a competent technician in charge is like manna from heaven. A marginal lab with insufficient supplies run by a poor tech will provide unreliable data, which is worse than no data. Many lab techs assigned to ships are fresh out of lab school and may have gaps in their knowledge. Once again, you may have to train your lab tech to do those procedures you require beyond routine CBCs and urinalysis.

It is a wise doctor who double checks Gram stain technique, malaria smears, culture plating technique, and looks all of the CBC slides and KOH preps until confident that they are being performed correctly. You may need to brush up on your basic science and micro techniques.

Don't neglect to take a few of your basic medical school Micro, Path, and Biochem textbooks along with you. You will make good use of them. Even if they are now obsolete, the simple procedures used aboard ship will not have changed all that much.

Overall management of the laboratory will be your responsibility. Make certain the space is kept clean and neat. Logs are to be kept up-to-date. Calibration and maintenance of equipment are critical if you want numbers that are not randomly generated. The various chemicals and alcohol in the lab make it a fire-prone area.

All laboratory chits should bear your signature. This does not mean you cannot allow your corpsmen to order tests, but you should know what they are ordering and why. The best way to do that is to countersign all chits. One flaw of most practitioners is that, when in doubt, we send out wholesale for more tests. Inappropriate tests can swamp the lab, deplete your departmental treasury, and cause terminal heartburn among your lab techs.

Most routine studies, such as CBCs, urines, serology and throat cultures, can be ordered by the corpsmen during routine Sick Call. A daily review and countersigning of chits assures that they are being ordered appropriately. Another reasonable shortcut is to give one blanket order for the routine tests needed for physical examinations and certain medical conditions; e.g., all females with abdominal pain will have a UA and pregnancy test done. This will save you the hassle of signing each chit before you see the patient. More sophisticated screening lab work, such as thyroid tests that will need to be sent out, must be ordered directly by the Medical Officer.

The most important element of laboratory studies is getting to see the results. The laboratory may not have as its number one priority getting the results back to your desk. Access may be difficult. It is essential that you know your predecessor's system and that system's success rate for the return of data. If you don't like it, build your own. You are the boss now, so set up a process that makes it as reliable and easy on yourself as possible. DO NOT get caught ordering tests and missing out on the results.

For particularly important studies, another mini-tickler system might be the best approach. Every few months your lab tech can follow-up on outstanding lab tests. This is particularly important for PAP smears, since you want to make sure that abnormal ones get follow-up. After you have seen the study result, the chit should be filed in the medical record, and a copy kept by Medical in a file system. Initial each chit as you see it. This protects your department as well as the lab tech. More importantly, it will be easier to find the results when the patient's medical record is lost during a consultation at the local hospital.

X-RAYS

Most vessels are issued at least one portable X-ray unit and manned with a technician trained to operate it. Larger ships—LPHs, LHDs, LHAs, LSDs, ADs, ASs, or aircraft carriers—will have a fixed unit with an adjustable table. Even the small portable units will allow you to get good extremity films and sometimes a good AP chest film. Abdominal series and skull series are difficult with these units because they lack power, but in an emergency, such a view might be obtained with enough quality to help you make some decisions.

Film processing varies between ships. Some carriers have fully digital radiology, and some smaller ships have X-omat units, but some have the old tank method. If you are unfortunate enough to have a tank, film results will be horrendous if the tank is not kept scrupulously clean, the temperature kept within the recommended range, and the chemicals changed completely after every three films are developed. Tanks can be a real pain.

X-ray technicians can pretty much be relied upon to know the most basic views. An additional reference source, such as Clark's POSITIONS IN RADIOGRAPHY, should be available as backup. Specific views you would like to have may be unknown to your tech and equally unknown to you. Analogous to the arguments for tight control for the ordering of laboratory studies, all x-rays should be ordered by the physician. Such a practice will help prevent overexposure for individuals who may, in fact, not need so many films. Likewise, the physician should read all films; nobody else is qualified, including the x-ray technician.

To keep a file of x-rays, store the films by the last four digits of the social security number, which will keep your system in line with the procedures at all Naval hospitals. All x-rays (and all patient care records for that matter) must be kept on file for three years before destruction. When they are destroyed, your x-ray tech must first recover the silver from them and turn the silver in for the silver recovery program.

You will also be required to have a radiation safety survey of the x-ray machine conducted every 2 years. This tests the machine to make sure that it is operating properly and not emitting unsafe levels of radiation.

OPERATING ROOMS

On most ships, one or more operating rooms will be available. Despite the size restrictions, the larger ships have very nice facilities, and you will be pleasantly surprised at the equipment available. Sterilizer and scrub areas are usually available in adjacent rooms. Most rooms also have an EKG monitor, defibrillator, and surgical supplies, including major instrument packs for chest and abdominal procedures.

Some surgical areas do not have the necessary instrumentation for general anesthesia, but often this is neither required nor desired. We all hope you will not have to perform major surgery at sea.

The doc has a good deal of latitude in how the OR is set up. One suggestion is to rig it as a trauma room. Trauma always occurs at the most unexpected time and place. It can be invaluable to have IV solutions, catheters, needles, crash kits, ET tubes, gastric lavage tubes, defibrillators, etc., all readily accessible in any emergency. There is no special magic formula. If you know where to find everything you need **and how to use it**, that is a good system. Check your trauma inventory to be certain that everything is present and in good working order.

Performance of **ELECTIVE** minor surgery is entirely up to you. You must be credentialed by the SURFLANT or SURFPAC Surgeon or other appropriate authority, however, before proceeding. You can do vasectomies and other procedures, provided you follow proper administrative procedures. A certificate from your training institution stating your proficiency in the procedure is needed. Check on the local laws.

Last but not least, be careful to get informed consent from all interested and entitled parties—both husband and wife for a vasectomy, for example.

WARD PATIENT CARE

Admission of a patient to the ship's medical ward is no different from admitting to the hospital. The chart of a patient at sea should be indistinguishable from one at a hospital on shore. Proper admission orders, signed and dated with times, should be written. A long form history and physical examination is required if the patient's stay exceeds 72 hours. Your orders, progress notes, and nursing notes are kept by the corpsmen and are likewise the same as in any shore-based hospital.

These administrative requirements have been dictated by the TYCOM Surgeon, and they are all non-negotiable.

Away from shore, you will probably find yourself the only physician on call for your patients. It will be necessary to spend much more time monitoring and checking on them than in a hospital with a highly trained nursing staff, residents, and a staff of consulting physicians. The corpsmen in charge of the ward may be the best, but they are not capable of the high degree of sophistication provided in a hospital setting. Critically ill patients will need nearly constant bedside attention until they can be moved. Even worse, there is nobody looking over your shoulder to protect you from a simple error in judgement or an inadvertent oversight. Check and double-check your

impressions, orders, and treatment plans. Communicate with consultants ashore. This is almost always possible, if not by voice circuit, then by message.

Less ill patients who are admitted to the ward remain the Medical Department's responsibility until they are discharged back to work. Some patients will require being "binnaced" for a period of time, but do not let them run around the ship, hang out at the geedunk, or generally give the impression they are goldbricking. Not only does this not look good in the eyes of the department head who wants that sailor's body, but your Sick Call will fill up with real goldbrickers who are looking for a free ride. One reputation not to have is that of a "soft touch." The basic idea is to get the patient well and back to duty as quickly as possible and to make certain that everyone knows that this is the real mission and purpose of the Medical Department: **To keep the largest number of sailors at their post the greatest percentage of the time.**

There is little or no reason to admit patients to the ward while in port. The most notable exception would be a foreign country without good medical facilities. Stateside, and in most Navy bases overseas, a shore-based hospital or clinic is usually available and infinitely preferable. Everybody is on your side on this one, and you cannot be accused of trying to turf your patients off on someone else. SURFLANT and SURFPAC both dictate that you use the best modality of care available at all times.

If it is your opinion that an individual is not severely ill and would be better served aboard ship than by the local clinic, OK, but do not do an appendectomy while pierside, or there **WILL** be a lot of explaining to do in the morning. Take care of your own as best you can, but do not hesitate to call for help. Most of the people at the other end of the telephone have themselves, at one time or another, ridden a ship or were assigned to some remote duty station. You will know them right away by their sympathetic attitude on the telephone.

Should you have difficulty with a consultant, the chain of command above that consultant has someone who, at some time, has been on the USS Neverdock or had a long tour of duty at Camp Forlorn. They'll be glad to help you readjust the consultant's approach. If you have a serious problem with a consultant and you're at sea, the senior operational Medical Officer above you will be glad to help. But a problem like that is really, really rare.

REFERRALS

There will be times, both at sea and in port, when you will need consultations. Referring patients to clinics and Naval hospitals for special evaluations can be easy if you do it correctly.

Paperwork is vitally important if you expect your patient to be seen by the right people, in the right place, and in a timely manner. A consultation form (SF-513) should always be filled out with pertinent facts when sending a patient to another physician for evaluation. This is a matter of common courtesy and proper professionalism. Don't just send a patient for an evaluation without at least giving the consultant an idea of where to start. If you are doing your job correctly, you already will have done an initial work-up. Include any tests, particularly those with a time lag, that you feel will be helpful. Put this information in the medical record, and make sure the patient takes the record along.

Here is the secret key to happiness when consulting specialists—**CALL THEM!** Contact the consultant before referring a patient. With luck, you'll get your questions answered right away without anyone else seeing the patient, saving everyone valuable time. If you still need to send the patient, you have established rapport. The consultant will not feel abused by an inappropriate consult. Last, but not least, telephone calls give you a point of contact for your patient. This does wonders for speeding up the waiting process and paperwork. The amount of work time lost by unnecessary waiting can be cut considerably by early telephone contact and proper pre-evaluation. **The telephone is perhaps the single most important, effective, and underutilized medical instrument; don't be afraid to pick it up.**

APPOINTMENTS

Referral appointments are usually made for the patient by the Medical Department. If you are at sea and expect to be in home port in less than a week, you can send a message requesting appointment times for patient referrals, or mail in the consult and await the appointment card. Messages, however, do get a quicker response (like six weeks quicker). Some clinics run walk-in clinics at specified times that are specifically for active duty personnel. Find out when and where they are, and use whatever streamlined system they may have developed to save you hassles.

If your ship is homeported where you did your internship, you will be far ahead of the game. Having points of contact at Naval hospitals will enable you to get patients seen faster (another reason to go visit the hospital frequently).

MEDEVAC

There will be circumstances while underway that mandate the evacuation of a patient to the nearest medical facility. Patients who are beyond the level of care you can provide or who may have a potentially life-threatening illness need to be sent to a higher level care facility. Never be too proud to admit that you can't help the patient. The Commanding Officer will always do everything possible to accommodate your request to evacuate the patient.

Evacuation is usually by helicopter. Occasionally ship-to-ship transfer via boat will be necessary. The CO must weigh the responsibilities of the ship's mission against the well-being of the patient. Everyone is depending on you to give your honest professional opinion. Again, be smart. Go prepared to present a coherent argument as to why your decision should stand.

Evacuating a patient is not easy and entails significant risk both to the patient and to the transport crew. Keep in mind that your patient will not be traveling first class on a 747. Helicopters are rough and, on occasion, have been known to fall in the drink. At least once in recent memory, a Navy doctor died when a helo went down at sea. Transferring a patient from ship to ship in rough seas is also VERY dangerous. Weigh all your options carefully.

The decision to MEDEVAC will need to be prioritized. The more critical the patient, the more the ship will consider interrupting its mission to accomplish evacuation. This may include course changes, changes in port call, flight quarters, boat operations, and sometimes well deck operations that involve the entire ship. For those and other reasons, it is important that you prioritize your request properly. Don't ask for an immediate MEDEVAC of an ingrown toenail! By the same token, don't sit on a hot appendix if you don't have to.

You can find the procedure for requesting aeromedical evacuation in SURFLANT or SURFPAC instructions, or look in the ship's pre-deployment operation orders for the area you are headed, or ask the Ops boss for help. Send a message to the nearest MEDEVAC facility (accepting hospital or clinic) stating the patient's name, age, social security number, diagnosis, and priority (explained below). Also include any information that would aid in implementation of a MEDEVAC, as well as any restrictions on flight or altitude. Consider the effects of flight and altitude on your patient, e.g., pneumothorax or other conditions sensitive to the rigors of rotary or fixed wing flight. This may include flight capabilities or non-availability, need for trained medical personnel to accompany the patient, drugs the patient requires, the presence of an IV, etc. The message should always be confidential and have the Fleet commander as an additional addressee to keep him/her informed of a medical emergency. The GMO Manual and The Basics of Aeromedical Evacuation, by LT Debbie O'Hare, have more information.

Never write out a diagnosis when sending a MEDEVAC message request. Always use an INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) code. The ICD codebook is part of the required library aboard your ship. This codebook lists possible diagnoses, giving you an assigned code number and letter for each. This ICD code should be used whenever official message traffic is written and received concerning a patient's diagnosis.

A patient's priority status must be included in the message request for MEDEVAC. URGENT indicates a life-or-limb threatening injury or illness. This should result in a pick-up within 24 hours. PRIORITY means not immediately life-threatening, but serious. These patients get picked up (theoretically) within 72 hours. ROUTINE means the patient can be picked up when the next available regular flight can be arranged. This often takes a week to ten days.

The system usually works reasonably well, but you might find yourself waiting for what seems like forever to evacuate some patients. The key is wording your message correctly. If someone is in critical condition, by all means, classify him or her as URGENT and get the patient and the problem off the ship. The problem comes with patients who are sick, but not critical, or who have injuries that are not life-threatening but require prompt treatment. They are all classified PRIORITY, but this alone won't get a timely flight. What will is describing the injury in enough detail to let people know that the patient needs prompt care. If you don't do this, the accepting facility will take its time in sending for the patient.

A routine or even priority MEDEVAC can take as long as a week to ten days between the sending of the message and the patient's arriving at the treatment facility. MEDEVAC flights make frequent stopovers to pick up and discharge other patients, which slows down the process considerably. Make certain your patients are "shipped" with everything they need (medical records, consultation forms, service and pay records,

clothing, etc.). There is no telling how many eons it might take for the patient to return to the ship.

Keep in mind that if you are sending a female patient to an all-male ship, you are well advised to send a female escort along, otherwise don't be surprised if they ask for one on the next helo. This does not have to be a medical person, and it's usually better if the two are friends. The same goes for suicidal patients who are being MEDEVACed. Their escort does not have to be medical. Try to tap their division, because you don't have the personnel to spare, and you may not get an escort back for several weeks. Just make sure that the escort has orders and money to get back to the ship.

There will be times when you need a true medical escort, and the best thing to do is request one in your MEDEVAC message, so they can send a flight surgeon or flight nurse along to escort the patient. The bottom line is that if a patient needs care within 72 hours, you must say so in your message. Never, however, categorize a patient as URGENT if they are not! This will destroy your credibility with the MEDEVAC system and tie up an aircraft that might be needed for a truly urgent case elsewhere. Use the system, but don't abuse it.

QUALITY ASSURANCE

QA is of paramount importance these days. Keeping good records and making proper entries in medical records is vital. You must review all the medical records for Sick Call at the end of the day. Be sure all entries show date and signature (with the name, SSN, and rank of the provider printed beneath the signature), vital signs recorded, proper diagnosis and treatment plans outlined, appropriate studies ordered and documented, and proper follow-up arranged. Those are the minimum requirements for health care records. The corpsmen will see the bulk of the patients and refer cases to you that need your evaluation. Make sure their records are correct.

To help your corpsmen in the basics of patient management, you will need to have an instruction called Medical Officer Standing Orders. This is from you to your corpsmen, in which you outline what types of patients they can see on their own, what patients they must consult you about, and what patients you must see and how quickly. You can also describe basic algorithms for beginning treatment, what kinds of studies you want on different types of patients, (e.g., HCG on all females with abdominal pain) and what paperwork must be completed on all patients, (typical Sick Call entry, log entry, A & I report, etc.), what types of medications the corpsmen can prescribe and what types you must prescribe, and so forth. This should be general enough to cover all areas of patient care and types of presenting symptoms but not detailed enough to be a cookbook approach.

This instruction must delineate areas of responsibility for corpsmen that you will feel comfortable delegating. Keep in mind that, regardless of what is written, you **WILL** be held accountable for the actions of your corpsmen. Of course if they knowingly violate a written order, you won't go to jail, but you will be reprimanded. The Medical Officer Standing Orders is the first instruction new corpsmen should read when reporting on board, and it should be read by all corpsmen monthly to keep the points fresh in their minds. If your predecessor didn't write one, it is one of the first things you should write. If you need a "go by," borrow a copy from another ship and modify it as necessary.

Another part of the QA process is your credentials packet. Before you left internship, you probably started this process. There is a great deal of paperwork, required certificates, and documentation involved (medical school transcripts and diploma, ACLS, ATLS and BLS certification, a current physical, etc.). Also keep in mind that you must maintain a valid state license while in the Navy or be awaiting approval if you have just finished internship (some states mandate 2 or more years of medical practice first). **ONCE YOU HAVE A LICENSE, NEVER LET IT EXPIRE.** The whole credentialing process is described in great detail in COMNAVSURFPAC 6000.3A, COMNAVSURFLANT 6320.1, as well as in the GMO Manual. This credentialing process may not be complete by the time you arrive on board, so you must request temporary credentials (90 days), from your CO. At the end of that time, you will have had a QA review by the assigned QA reviewer (see below), who will then make a recommendation concerning permanent credentials (2 years) to your CO.

You will be assigned to a doctor who will be your QA reviewer, usually the group or squadron Medical Officer. Once a quarter, they will come and review your medical care. As mentioned above, your corpsmen will administer most of the care, but your preceptor will be evaluating how well you supervise your corpsmen's medical care. They will also review the Sick Call log to see patient work load and completeness of entries, the Medical Department daily journal to see that required information is being entered, and review the STD log for proper follow-up and treatment. They will give you and the CO a brief on their findings. Should they find any cases where they doubt the standards of care were met, they will conduct a more extensive review of that case, read the record more closely, talk to the patient and staff, consult with specialists, and do whatever is necessary to make a determination of standard of care. Again, for more details of QA procedures, refer to the above instructions.

If you have an IDC on board, you will probably be the QA reviewer for them. You do the same for them as is done for you; then you compile a short report every quarter and forward it to the designated individual. You will receive a letter appointing you to this position, as well as stating to whom to report. Further details of reports are in your TYCOM instructions as well as in OPNAVINST 6400.1

In theory, QA is intended to ensure that the medical care given is of the highest quality. If problems are found, the QA process is intended to assist in identifying ways to correct those problems and to try to prevent their recurrence. This program is here to stay and will continue to improve over time.

WATCHBILLS

Everyone stationed on the ship is on a watchbill and assigned a watch, except for the CO, XO, and command master chief. Watchbills and watch routines differ when in port versus under way for most departments. You and your people may not be standing a Quarterdeck watch, but everyone will stand a watch of some sort. If you are trying to qualify as a Surface Warfare Medical Department Officer (and you really should), then you may need to stand Quarterdeck watches (see Training). Your watch rotation will be assigned based upon the number of Medical Officers. If you are the only one, your watch will probably be a phone watch from home or on a pager. If there are several Medical Officers, it may be an on board watch. You will have to find out the command's

watch policy for Medical Officers from your predecessor. Underway, you are obviously on call 24 hours a day.

Your chiefs will also fit into a watchbill somewhere. It will probably be as a medical duty department head, to be your representative after hours. The duty department head will keep the daily journal, maintain the Accident and Injury reports, ensure that a corpsman goes to fire party drills and muster, attend 8 o'clock reports in port, report to other musters the CDO calls, and render emergency care after hours. You also need a junior corpsman on watch (if you have the manpower) to attend fire party muster and drills as well as to assist the duty department head. This way, the medical spaces will always be manned by at least one person.

The intent of a ship's watchbill is to ensure that, if there is any emergency (including having to get the ship underway), there are enough people on board to accomplish this safely. This must include enough qualified personnel to perform all the underway duties if necessary—another reason to only have your best people as duty department heads.

Your corpsmen should be in the same watch section rotations as the ship, which are usually once every 3 to 6 days. They can always be in a more frequent watch rotation, but they shouldn't be in fewer rotations than the rest of the crew. In other words, if the crew has duty every 4th day, your corpsmen should also have duty every 3rd or 4th day, not every 5th or 6th day. This ensures fairness with the rest of the ship. Your corpsmen usually think that they are special, that they work harder than the rest of the ship, and that they shouldn't have to do what the rest of the ship does. Not true. They are not different. They are members of the ship and have the same military responsibilities as everyone else. Other departments work as hard or harder than your people do. You will need to help your corpsmen realize this fact and to help them see where they fit into the greater scheme of things. Only protect your corpsmen from standing Quarterdeck watches. HMs stand medical watches only, unless the CO says they are needed somewhere else. The CO, obviously, is the boss.

Your departmental watchbill is promulgated by the CPO and submitted by your division officer for your approval. Once approved, give everyone a personal copy and post one within your spaces. Also, route a copy of your watchbill to the senior watch officer, so it can be incorporated with the other departments' watchbills (Quarterdeck watches, Engineering watches, Security watches, etc.) into the final ship's watchbill.

In addition, just as your people are on a watchbill, so are they on a working party list. Generally, Medical does not have to send anyone until it is a 45 to 50 hand working party, and "technically" Medical is only supposed to be there in the role of a safety observer. That is how you will write it in your instructions. The reality, however, is that since your people eat the food and use the supplies that are loaded by the working parties, there is no reason that they can't hump boxes like the next sailor. It saves putting your people in an uncomfortable situation with their peers.

Chapter 8, TRAINING

YOURSELF

There are no other years in a medical career that will depend so heavily on personal initiative for success. Not much real self-motivation was required to get through internship, since there was always someone looking over your shoulder to provide endless inspiration. All that changes drastically when aboard ship. You are very much on your own. Not only do you have to provide self-motivation, but also you will be required to make many decisions previously made for you.

It is easy to become lazy and fall into the trap of not continuing your medical education. A day off becomes a week, a week a month, and a month a year. Before you know it the entire two years of operational medicine has been an educational black hole and a waste of time (exactly what you feared in the beginning). If that occurs, it is a self-fulfilling prophecy. There is no one to blame but you. While you certainly have to show extra incentive, opportunities for ongoing education are present, and, in fact, there is more latitude to pursue your own interests than you probably have ever had in the past.

Make a study plan before you board ship. If you are going to return to a residency in Internal Medicine, you might want to obtain the Internal Medicine Board Study Guide. If you are going into a subspecialty, this may be your last chance to study broadly in medicine and surgery. This is also a good time to begin to plan for your graduate medical education. Discussing the status of the specialty you are considering with the specialty advisor along with early planning for interviews will give you a leg up over those waiting until the last minute.

Many of us have curiosities that go well beyond the specialties of medicine but have not had time to pursue these interests. There are medical CME courses through the AMA, Medical Letter, and Scientific American to name a few. Several colleges, including Universities of California, Chicago, and Maryland, offer a variety of correspondence courses at the college and graduate level.

Your ship may be homeported in an area where courses are offered. You can use these opportunities to indulge yourself; take up some non-academic pursuits in which you always have had an interest. When will you have another chance to learn how to scuba dive, parasail, windsurf, or play polo? Also, bring along those books you always wanted to read but never had the chance.

If you view the Navy as a career, there will be a time when you will become involved in administration. Before you scream "heresy," take a moment's reflection: if physicians are not willing to administrate themselves, someone else will, and do so happily. Many command and senior staff billets are now coded 2XXX, which means that any Medical Department officer may fill them. There is nothing wrong with Medical Service Corps, Dental Corps and Nurse Corps officers being commanders of hospitals and health care facilities, but they are not physicians. If we physicians wish to be competitive for command, we must train ourselves to plan and administer health care, as well as provide it on an individual basis. Numerous graduate programs are available, one through the University of Southern California (Master of Science in Systems Management), which may prove invaluable later in your career.

Related to that subject is the recurring subject of leadership. The Navy has a series of courses that are mandatory for certain levels of responsibility. Once called Leadership Management Effectiveness Training (LMET) and undergoing constant change, the series is an important step in advancement for you and those who work for you. In addition, there are professional Navy Doctor courses, like the CATF Surgeon Course and others, that can prepare you to do more and better within the afloat Navy.

The Navy offers various correspondence courses, both medical and military. The medical ones cover a wide range of topics—Communicable Diseases in Man, Cold Weather Medicine, Heat Stress, and Combat Casualty Care, to name a few. Not only do these help you easily learn these topics, but also most of them give you Continuing Medical Education Credits, something most state licensing boards require. These are also very good for your corpsmen to do, so encourage them. The ship's Educational Services Office (ESO) has a complete listing of available courses that is contained in NAVEDTRA 10052, and they will help you send off for them.

Part of your education will include reading the various instructions and manuals that pertain to Navy programs and your Medical Department. This book lists governing instructions for the subject areas covered, but to obtain a complete listing of all Navy instructions, look at The Department of the Navy Consolidated Subject Index, NAVPUBINST 5215.1 series. All current Navy instructions by category and subject listing—i.e., SECNAV, OPNAV, etc.—are presented. This instruction is located in the Admin office.

SHIPBOARD QUALIFICATIONS

Since you are now assigned to a ship, you must become 3M and Damage Control qualified, as must your people (more in 3M and DC section). There is also another qualification that you should work for: the **Surface Warfare Medical Department Officer (SWMDO)** pin. This pin is tough to earn and only a select few docs succeed. It was initiated in 1991 and revised completely in 1998. Pursuit of the pin means learning a great deal about how your crewmember patients do business day-to-day, along with how you fit into the scheme of things. It demonstrates to the crew that you care about what they do, that you want to meet them on their turf, and that you view yourself as every bit as much as Naval officer as they are—you just don't know as much about their job as they do. It also demonstrates a little humility and a lot of professionalism. The knowledge you'll accrue will make you a safer, more trustworthy shipmate, aware of how the ship works and helpful in an emergency. All of that matters to your patients.

In preparing for the SWMDO insignia, you'll find that many of the requirements you would have to learn anyway, just to do your job better. By having completed 3M and Damage Control, you are halfway done. Two others that are extremely helpful are the Division Officer Afloat and the Officer of the Deck Inport. The Division Officer Afloat covers shipboard administrative matters, correspondence, inspections, security, supply, communications, Navy programs, etc. Since you have to do most of the tasks just in the normal course of your job, it will make your life easier if you know how the Navy system works on your own (just in case the chief isn't there). The Officer of the Deck Inport helps you understand the language that your shipboard counterparts are using. You learn the deck terminology, the ceremonies, customs and traditions, safety, small boat

usage, weather, environmental issues, and shipboard emergency responses. You will also have to complete designated sections of the Surface Warfare Officer and Surface Warfare Officer Engineering PQSs and then pass an oral board. This will definitely help you better understand Medical's role and how Medical can best support the line and the ship's mission.

The entire qualification process takes a little time, but the 1MC and all the alarms and bells will finally make sense to you, and you will demonstrate to everybody aboard your total commitment to the job you really have to do. Earning this qualification will also earn you the respect of your future patients (both active duty and retired). They will recognize how professionally you approached a challenging job they understand, and how well you succeeded.

ENLISTED SURFACE WARFARE SPECIALIST (ESWS)

The corpsmen are all eligible to qualify as an Enlisted Surface Warfare Specialist (ESWS), closely related to the Surface Warfare pin discussed above. You should strongly encourage them. This is becoming an increasingly important requirement for advancement and may be mandatory by the time you read this. They receive two points on their advancement exam, and this is something that E-7, 8, and 9 selection boards want. Every ship sets up the program differently, but you should try to get your people interested and involved in it. But remember: you can't force them.

SHIPBOARD TRAINING PROGRAMS

You will also be involved, whether you choose to or not (and you should want to), with a variety of shipboard training programs. General military training (GMT) programs are outlined in OPNAVINST 1500.22D and NAVEDTRA 4600-8A and include such topics as operational security, maritime strategy, and multiple medically related topics. Since half of the GMT is medical training, you will need to be closely involved with the training program. For non-medical GMT, you will need to make sure that you and your people receive and document that training. You will be expecting others to take your medical training seriously; you must do the same for other departments' training requirements. You will probably not be assigned the job of command physical fitness and weight control officer since those are command programs, but be prepared if you are. Some commands even have a fitness-coordinating officer to develop programs and assist individuals with specific problems. (See Physical Fitness.)

INDOCTRINATION OF NEW PERSONNEL

The Medical Department is responsible for training all newly reported personnel in a variety of medical topics. COMNAVSURFXXXINST 6000.1 series lists exactly what information is required to be taught. You will need to see how your ship does it, but to cover everything required takes at least one day devoted to medical training. First aid training—to include buddy aid, CPR (basics), and use of stretchers—can be covered on Medical's training day or under damage control training. It is a good idea to have several people trained to give the lectures (some can be on tape) so that one person is not teaching all day. You will find that it's hard for one person, including you, to do all of

the training. It is a good idea to briefly meet with all newly reporting personnel during their check-in time. A 60-second “welcome” will help you know your people, discover any major problems they may have, and let them know who you are.

Topics to be covered during indoctrination include: medical services available on board and ashore, TRICARE, personal hygiene, AIDS and STDs, pregnancy awareness, and the radiation health and safety program if you have one on board. Depending on the numbers of newly arriving personnel, indoctrination occurs once or twice a month and is usually three to four weeks long. Make sure that you get attendance rosters every time the medical section of indoctrination training is done.

All personnel are required to go through the Indoctrination Division, including officers. Here personnel receive various safety briefs and an introduction to the people and programs available as resources. Security lectures, basic 3M, and Damage Control training are included, as well as the Navy Rights and Responsibility workshop. As stated before, what is given will differ with each ship, but expect your new personnel to be gone for training for 3-4 weeks after they arrive. They will generally still be available for under-instruction watches in Medical, so you will get a chance to start orienting them.

ALL HANDS MEDICAL TRAINING

The Medical Department is responsible for the bulk of all-hands training. There are approximately 25 lectures that all personnel must be given annually. Some instructions allow you to set up an 18-month training cycle, but it is much easier to do all training on an annual schedule. As you can see by the numbers, that comes out to almost one every two weeks. CNSP/LANTINST 6000.1 series list all the medical training. How you accomplish this is up to you. One way that has worked—and that the inspectors like—is to use the 3M cycle boards to list all the training requirements for all hands and for certain divisions. Then across the top list the months. Certain health topics have national months, i.e., May is hypertension month, October is AIDS awareness month, etc. It is a good idea to coordinate the all-hands training with those months. This will reinforce the other things you may do, i.e., posters, POD notes, etc.

Sit down with your training officer and the ship’s employment schedule for the year. The Operations officer has this and it must be part of your department’s training schedule files. Look at what the ship will be doing at various times and pencil in all the lectures for the year, trying to distribute them evenly. Obviously if you are going on a deployment to warm climes, schedule heat stress training at the beginning of the deployment. If Engineering inspections are scheduled, do hearing conservation training prior to the inspections, etc. There is no exact science for this, and lectures can always be rescheduled when operational commitments change (that’s why it’s in pencil). When you reschedule something, do like you do in 3M, circle the rescheduled lecture, put an arrow to where you are rescheduling it, and cross it off once that lecture is completed.

Note. For ships that are nuclear-capable, or that carry nuclear weapons, there is the additional requirement of radiation and nuclear weapons accident/incident training. Coordinate with the cognizant department for when this training is scheduled. The nuclear Navy is very conscientious about ensuring and documenting that **EVERY** crewmember received this training.

Once you have come up with the tentative schedule of what months you want to teach particular lecture topics, give a copy to the Operations Officer so that it can be put on the ship's quarterly schedules, which are used at PB4T to come up with the weekly schedules. These procedures are outlined in the SORM and the reason for following them is, if your training is already penciled into a quarterly schedule, you are far more likely to be able to accomplish said training than if you try to add it at PB4T. The system will even occasionally work to your advantage, if you use it. Of course, copies of everything generated above are kept in the files for at least three years. At PB4T the actual day of the lecture will be scheduled. If lectures are being shown on SITE TV (see below), schedule it to run twice on that day. 0730 or 0800 and 1230 are good times when you can get most divisions to watch. Divisions normally schedule their inservice training for first thing in the morning or right after lunch.

How to do the actual training is your choice and will depend on the size of the ship and the resources you have available. The easiest way is to use the SITE (ship-wide) TV system. Go through the ship's library of medical tapes and see what is there. Almost all of the training required is on a videocassette, and the latest ones (and some old ones put out by Pensacola) are very good. They are entertaining and informative, are presented at the crew's level, and attempt to use a shipboard perspective. If you don't have a tape for a particular topic, or if you hate the one on board, you can make your own and tailor it for your audience. The larger ships—CVs, LHAs, ADs, ASs, AORs, AFSs—will have the capability to make tapes for you. You can also check out the tape libraries of the other ships and Group Medical to see what you can copy. The aforementioned ships will also make copies if you provide them with a blank tape.

Some lectures are best given in person the first time. First aid, CPR, and stretcher training are of prime importance. All hands must be well versed and be able to do initial first aid as outlined in FXP-4. When someone does the lectures in person, by division, the crew members have a chance to practice first aid themselves under the eye of a trained individual. It is a good idea to train your corpsmen to be first aid instructors. Not only is that part of their rate training, but also the crew responds better if one of their own is doing the training.

It is then a good idea to demonstrate the proper techniques for each First Aid topic in short, 5-minute "commercials" that are then shown on SITE TV in between the movies. **I cannot stress enough the importance of the crew's learning first aid. In a mass casualty situation on board, you do not have the manpower to perform all the initial actions, and logistics are such that the personnel on the scene at the time of the casualty must take immediate action or a patient may die.**

You will also get the opportunity to test and re-test the crew on how well they learned first aid. There are nine types of injuries on which crewmembers are tested during refresher training (see Deployment). You will be grading crewmembers at least quarterly on these nine injuries. This is the perfect opportunity to give additional and refresher training to different divisions. Almost all of this must be done while the ship is at general quarters, so you will have to plan ahead (PB4T schedules general quarters drills). The grading sheets are in FXP-4, along with the grading criteria. When completed, give a copy of the grading sheets to the Ops boss, since it becomes a part of the ship's readiness report.

The annual personal hygiene lecture is another one that can be done by divisions, although it is better to give each division officer a copy of the lesson topic guide for that lecture and have them give it to their division. This falls under a division officer's responsibility also, and Medical can help them with their training requirements.

Okay. Now you have done all this great training, how do you document it and get credit for it? The Operations Officer has standard rosters that you can use. On the front is written what training was given, when, the objectives covered, and who received the training. On the back is one column for persons who attended the lecture and their rates and another column for who did not attend the lecture and their rates. This is important information, since you must be able to demonstrate the numbers of enlisted, chiefs, and officers who did and did not attend. Some ships and inspectors may want you to document who did not attend training and when they finally completed the training. Without a computer, the latter is almost impossible. The easiest way to get the above information is to give a copy of the roster (the columns of names) to each division one to two days prior to the scheduled lecture for them to fill out and return to you after they have viewed the lecture. Since you will be keeping a list of who has and has not returned their rosters, you can send out periodic reminders of delinquents at morning Officer's Call. Keep in mind that taped lectures shown on SITE TV can be viewed by divisions on their own schedules. You may get batches at once from some divisions, since once or twice a month they may schedule a training day.

Once you have collected the rosters, count the number of officers, chiefs, and enlisted personnel who attended. This number is noted in your training log beside the date and what lecture was given. Some inspectors may also want to see an outline or brief description of what the lecture covered. The above sounds like a lot of work, but once your system is in place, it becomes very easy and almost automatic. Training the division officers to complete and return the rosters to you is the hardest part of this system. You must also keep track of when training is scheduled so that it actually gets scheduled as well as completed. If your all-hands and indoctrination training programs follow what is outlined above, you will get an outstanding for that section of your MRA.

Note: Of course you should always be ready to give the wardroom a quick brief on the latest medical "Hot Topic" in the news. It is a good way to inform and prevent rumors or misinformation. Usually you will be asked these questions while you are eating.

SPECIALTY TRAINING

Certain divisions require additional medical training annually. The Engineering and Supply Departments contain almost all affected divisions. These lectures are placed on your cycle board, but all documentation and scheduling may be kept between you and the division concerned. All of the specialty lectures have lesson topic guides in the CNSP/LANTINST 6000.1 series, or the local Preventive Medicine unit can help you with some of the others, if you don't have a preventive medicine technician (PMT).

The Engineering Department requires additional heat stress and hearing conservation training for all members. Since Engineering has at least one or two inspections a year, your lectures will be incorporated into their training program. Usually the Engineer comes to you and asks when it can be done. Yes, this sounds like an unusual event, but Engineering inspections are very grueling and the CHENG wants every possible

advantage. The IC-men require training in the care and feeding of the WBGT meter. There is a Navy course that specifically teaches this, as well as a film if needed. The Water King and that division require training in the potable water system, and R-division personnel require training in the CHT system. The latter two training lectures should be done semiannually.

The Supply Department requires additional heat stress training for all laundry (SHs) and food service personnel (MSs and current FSAs). It is particularly important to stress the need to maintain accurate heat stress logs and to contact Medical for a dry bulb reading over 100°F. This is usually the biggest problem area in your heat stress program. Additionally, SHs who work in the laundry and barbershop require annual training for those areas.

The MSs require annual food service training. If you have a PMT, that's an area for their special knowledge, and some of the senior MSs are certified to conduct this training. Either way you must maintain rosters of when this training was conducted and who attended. There are also specific cards (NAVMED 4061/1, Food Service Training Certificate), which the Food Service Officer maintains on each MS, that you and the lecturer sign. You sign after the lecturer and only if the person's name is filled in. Never sign blank cards. The 90-day food service attendants (FSAs) also require 6 hours of training prior to starting their mess tour. The Food Service Department conducts this training but may want and should have Medical's input (usually one to two hours of medical training). Find out how the FSA training is conducted when you arrive on board.

In addition, personnel who are on an asbestos rip-out team are required to have annual training on the health effects and hazards of asbestos exposure. This must be documented in their divisions as well as your training records. There are other programs of tremendous potential value. An example is training in CPR, which is always well received and is a morale factor among the crew. Many divisions require CPR certification for their work—EMS, ETs, RMs, etc.—as well as your own corpsmen and dental techs, who must be CPR certified annually. It is, therefore, a good idea for several people on board to be BLS instructor certified so that you can conduct CPR training for the crew.

CORPSMEN IN-SERVICE TRAINING

Most corpsmen coming aboard have gone through corps school in fourteen weeks or so. Some have had extra training such as laboratory or x-ray technician school in less time than that. They will usually be young, inexperienced, and plagued with self-doubt. Arriving on board, many young corpsmen have starry ideas of being Dr. Kildare in uniform. They are jolted into reality when they discover that 75% of their time is spent cleaning, taking inventory, and performing inspections and administrative duties. The more you can do to keep their enthusiasm high, the better.

As resident high guru, this is where you can have a major impact on your corpsmen. Devote a lot of time to in-service training. Along with the constant damage control and administrative training, they must receive additional medical training. You will be surprised how receptive and attentive they are for the time you spend helping them be better "docs." It will also benefit you in the long run as your corpsmen become better

trained and render better care. They will need to refer less to you, and their referrals will become more appropriate.

HM in-service training can take any form that you find works. One model to use is to set up a series of lectures that the corpsmen give to each other. This is a chance to use everyone's talents and for each corpsman to become an "expert" in a specific area. This lecture series is based on HM requirements from the Hospital Corps manual and HM training manual. There are approximately 110 topics to be covered annually. These are given in one-half hour blocks four days a week (one day is for field day). If you are very conscientious you can cover almost all the topics (if you reschedule the missed ones).

These topics are intended to help the corpsmen with their rate exams; they are legion:

- Occupational Health programs (asbestos, mercury, heat stress, hearing conservation, etc.),
- Preventive Medicine programs (food sanitation, pest control, water sanitation, sewage, pollution standards, immunizations, tuberculosis, STDs, etc.),
- administration (health record verification, form numbers, decedent affairs, personnel records, required reports, naval correspondence, etc.),
- drug and alcohol abuse,
- legal matters,
- pharmacy (how to fill prescriptions, dilutions, antidote locker),
- preparing a suture pack,
- operating medical equipment (sterilizer, suction machine, etc.),
- basic laboratory skills (urinalysis, microbiology, gram stain, CBC, RPR, blood typing),
- preparing an x-ray jacket,
- and others.

These are the bare-bones type of training you must do. However, as you can see from some of the topics, this doesn't always help them see patients or help you run the daily functions of the Medical Department.

The bottom line is that your people need to be qualified to do the basics of every job within the Medical Department. These qualifications need to be in writing and in their training jackets. Naturally, your techs will be the specialists in their areas, but if the lab tech or the pharmacy tech is on leave or TAD, you can't shut those areas down. Your people must be cross-trained in those areas so that someone can fill in for them. Things won't be done as quickly, but they will get done. No one can be irreplaceable. If you let someone become irreplaceable, Murphy's Law guarantees that they will be an unplanned loss with no replacement in sight.

Next, what you need to do is plan a continuing series of medical lectures where you go over common outpatient diseases, their signs and symptoms, diagnostic findings, and treatment modalities. Remember, keep it at a very basic level. Your corpsmen are eager young minds thirsting for knowledge and waiting for you to fill them with that knowledge. Plan your lectures to hit the seasons: acute respiratory illness before cold and flu season, low back pain prior to spring training, gastrointestinal and headaches anytime, etc. These should be scheduled as the workload allows—once or twice a week or once or twice a month.

Those lectures are for everyone in the department. Of course, you will be giving individual and additional training to each corpsmen as they bring patient problems from Sick Call to you. You will also be individually counseling them on their charting as you review the medical records. If time permits and there is a classic case of something— i.e. a boil, an otitis media, etc. —bring in any of the corpsmen you can find. They, like you, tend to remember things that they have seen, and it's worthwhile to have a real patient for a teaching model. The crew members generally do not mind; they tend to enjoy the extra attention.

How do you put all of the above training into a schedule that still allows time for something other than training? Read on. Remember those weekly schedules that were developed after PB4T? Those are to be used to develop your weekly training schedules.

Just as you developed a quarterly and annual training schedule for the crew, do the same thing for your department. Develop a master list of those 110 HM topics so that, each quarter, you can see which topics were previously covered and which are left to do. Pencil those onto blank monthly forms. Then add all shipboard medical training (your people need it too). Add any General Military Training (GMT) that is scheduled, (other people have some required training too). Add a weekly safety lecture (some of the medical ones double as safety lectures) or whatever your Safety Department wants. Add a monthly career counselor lecture, and you have an inservice training program.

The only thing left is to document it. The SORM again gives you a format for inservice training. Basically take a roster of all your people and across the top, write the date and title of the lecture, and then put an X next to the name of those present. For persons not present list why (TAD, leave, etc.). Keep this with your shipboard training program, and you will be set for medical and command inspections.

OTHER HM REQUIREMENTS

There are some off-the-ship courses your people need that are usually given in the local area (so no-cost orders). You will find that ships do not have a lot of travel money, so it's hard to send people TAD away from the area. One is pest control certification, or "how to be an Orkin man". This is a one-day course, with one evening of spraying. If you are on a large ship, the course director will ask if the students can spray your galleys. Let them; they need the practice, and that is one less thing that your people have to do that week. Anyone can go to this course. Try to send as many of your corpsmen as possible. It is good training that they need for advancement exams, and everyone wants to go to a course off the ship. Another good one is audiometric technician. This is a 3-4 day course given at the local hospital. Again, send as many people as you can. You always need to get audiograms, and even if you don't have a booth on board, you can borrow one from a ship that does or from the local branch clinic if you have trained people. This saves a lot of aggravation.

The Navy Environmental and Preventive Medicine Units (NEPMUs) are also sources of training for corpsmen, particularly the lab tech. They give intensive training in preparing and reading malaria smears, bacteriological tests, and ova and parasites. These courses are also open to Medical Officers, so go if you enjoy playing in the lab.

Corpsmen are also required as safety observers for numerous ship evolutions. Check your ship's SORM for specific manning requirements (see Manning section for general requirements). While you need to have one person designated and trained for each station, **ALL** corpsmen should know what Medical's role is for all special evolutions. Part of their in-service training should be to rotate through all ship's evolutions. You should also make it a point to observe these evolutions yourself if you have not seen them before. This will give you an appreciation of the routine dangers your patients go through everyday. Besides, watching flight operations or underway replenishment is exciting and a nice break from seeing patients. And it helps with your SWMDO pin requirements.

HM ADVANCEMENT

Advancement, continuing education, and special Navy training program opportunities for your corpsmen must be funneled through you. Many of these ongoing programs are competitive within specific grades. These include various officer programs, Broadened Opportunity for Officer Selection and Training (BOOST), Medical Enlisted Commissioning Program (MECP), specific rate programs for enlisted C-schools, and Naval Reserve Officers Training Corps (NROTC), which includes nursing school scholarships, Warrant Officer programs for technical nurses, Physician's Assistant training, and Medical School programs.

Your ship's and departmental career counselor has a more extensive listing and should be actively promoting these programs within the department. Your job will be to assist your corpsmen, identify qualified individuals, and support them. Push for their training whenever operational demands allow, and support every opportunity for their continued advancement. You will do them, yourself, and ultimately the Navy immeasurable good. Fleet corpsmen on the whole are very talented and very competitive. Encourage them to think long term about their future. Even if they don't make the Navy a career, you will still be doing them a great service. **Once again: if you don't stick up for your people, no one else will.**

STRIKERS

Along the lines of training, undesignated personnel may want to become corpsmen and try to "strike" for HM. The only way someone can become a corpsman is to go through HM A-school. To accomplish this, they must have the required ASVAB (Armed Services Vocational Aptitude Battery) scores and demonstrate the motivation and maturity necessary to be a corpsman. In this attempt, they will work in Medical in their spare time to learn about the rate. You and your corpsmen will help train them in the basics of medicine, i.e. vital signs, Sick Call logs, medical records. If you feel they would make a good corpsman, write a recommendation to that effect when they submit their HM A-school packet. If you do not feel someone would be a good corpsman, and they have demonstrated that they wouldn't be a good corpsman, don't let them work in Medical and don't recommend them for A-school. Note: strikers cannot stand watch as HMs.

PQS BOARDS

These are part of documenting divisional training requirements. These, like the Watch, Quarter, and Station Bill, must be posted within your department. Each division has its own PQS Board. What is listed on them is each person assigned to the division, with all shipboard (3M and DC) and divisional (CPR, HM PQS status) requirements. How to complete one is outlined in the SORM and in greater detail in the PQS Manager's Guide NAVEDTRA 43100-1C.

What PQS boards show is the status of each person's qualifications at a glance. Boards are generally updated when the monthly training report is being compiled. This report goes to the CO via the Operations Officer and shows numbers and percentages of personnel qualified in shipboard requirements (3M, DC, watch stations). Ideally your numbers will be 100% qualified in shipboard required PQS, and this is what you must strive for.

Posted beside the PQS board is a list of people who can sign off various PQS items or qualifications, i.e., 3M, DC, etc. This includes personnel within as well as outside the department. This list should be updated as needed, but do it at least annually or before any inspection.

Chapter 9, NAVY PROGRAMS

ALCOHOL AND DRUG ABUSE

The Navy has a tough drug abuse program that has become very effective in cutting down on the use of illicit drugs. The alcohol abuse program is also having an impact. As Medical Officer, your involvement in this program is to help identify those people physically and psychologically dependent on drugs and alcohol and to get them help.

There should be a Command Drug and Alcohol Program Advisor (DAPA) who submits drug and alcohol reports to the command. This job requires screening and setting up counseling for those in need. The DAPA will refer people to you who may be drug-dependent. Your involvement will be to determine whether there is psychological or physical dependence and make recommendations for treatment, such as hospitalization, alcohol rehab center referral, drug rehab center referral, etc.

The command should be actively involved in this program. You should not have the responsibility of trying to rehabilitate every marijuana smoker on board.

You should not be the DAPA. If your new crew sees you as the “drug enforcement officer,” your credibility as a health care provider diminishes. They will be afraid to come to you voluntarily for help, as encouraged by OPNAVINST 5350.4. Furthermore, every time you need to do a urinalysis for medical purposes, they are going to think that a drug screen will be done. This is not necessarily bad, but those people requiring urinalysis testing for a medical diagnosis may be afraid to submit samples. A person should be able to come to you, in confidence, with a problem. This won’t happen if the ship’s impression is that you’re the “drug enforcement officer.” (See Confidentiality.)

Try to divorce yourself from the DAPA image as much as possible. Impress upon the command the importance of separating the medical from the legal aspects of the drug program. If the Captain, however, deems it necessary that you run the programs, you must. In that instance, keep yourself out of the administrative aspects as much as possible.

You should be familiar with the three levels of drug and alcohol rehabilitation in the Navy.

1. Level one is a local command program. Your DAPA should set up counseling sessions and coordinate outpatient counseling with Alcoholics Anonymous and various drug rehabilitation groups. If possible, two people should be assigned as DAPA counselors, one for drugs and one for alcohol. Alcohol is a major problem and causes sailors more grief than you can imagine. Command support and understanding is necessary to help these sailors.
2. Level two is short-term counseling. There are two programs run by Counseling and Assistance Centers (CAAC). One is 30-day inpatient treatment requiring TAD orders, and the other is outpatient evaluation and counseling. AA meetings and drug awareness groups are also utilized at this level. These are usually set up as a form of continual follow-up care after a person has been through level 2 or 3 treatment. The CAAC counselors, especially if you have some on board, can also be used as counselors for people who just need someone to talk to or need help with stress management.

3. Level three is a 6-week inpatient treatment program at a Naval Hospital or the drug rehabilitation center in San Diego. This is reserved for those individuals recognized as being heavily drug addicted or alcohol abusers but who the command feels can be rehabilitated and can be of further use to the Navy. This is usually a one-time deal. If they fail treatment, they are often discharged from the service. However, if they are senior enlisted personnel or officers believed to have career potential, they can be offered a three-week inpatient refresher treatment. After that, if they have a third alcohol-related incident, then they are separated from the Navy.

There is also a two-week Visiting Professional's Course that the Alcohol Rehabilitation Service (ARS) conducts for supervisory and medical personnel. This is to educate supervisors and healthcare providers about alcohol abuse and alcoholism. The course consists of lectures and group sessions with the ARS patients, as well as AA/ALANON meetings. If you did not attend during internship, GO. You should also recommend that the CO, XO, CMC, etc., attend so they have a full appreciation and understanding about alcoholism and the problems associated with it.

Distinct from this is a program called NADSAP that is usually required of all enlisted personnel under age 26 in order to get an on-base sticker for their car. This is a one week, outpatient class that discusses stress and healthy alternatives to drinking and violence in order to relieve stress. It also discusses the importance of moderate drinking and the avoidance of drugs. This can also be made mandatory for first time alcohol and drug abusers as part of the command Level One treatment program. Most of your people will need to attend this class or should just for the educational value, so plan to schedule them for it.

Remember that most of your young sailors will be alcohol abusers just like your college friends were. But do keep in mind that there are plenty of 18-20 year old alcoholics who have been drinking heavily since the age of 10-12. Also keep in mind that the legal drinking age in the US is 21. (It is frequently ignored.) It is therefore important to educate your staff to be able to identify the wide spectrum of alcohol-related problems with which people present to Medical. This will prevent people from falling through the cracks, which may delay an early intervention.

Most drug abuse in the Navy has been recreational use of marijuana, although cocaine is common in some areas. Well over 90% of all positive urinalyses will be for THC. It only takes one offense. Once caught, they are discharged from the Navy, period. These sailors are processed for "administrative separation," as per OPNAVINST 5350.4. If an individual is a good performer and E-3 or below, they can be referred to you for a dependency evaluation and then given a second chance. Most are simply recreational users and not actually dependent on drugs. You may be able to help some get squared away with local counseling. For personnel E-4 and above, including officers, there is no second chance. One incidence of drug abuse, and they are discharged.

The bottom line is that the Navy's drug and alcohol abuse programs work! Keep your role strictly medical, if possible, and avoid "drug enforcement." You can best serve the crew by being a consultant for the individual with a true problem who wants rehabilitation. Discuss these points with your Commanding Officer; your drug and alcohol program will run much better.

PHYSICAL FITNESS AND WEIGHT CONTROL

The Navy has a significant interest in physical readiness and weight control. Of the services, the Navy has historically had the least emphasis on physical fitness. The Navy Department has acted to remedy this situation and has instituted a readiness program.

As Medical Officer, you have a definite role. As part of your collateral duties, you may be appointed ship Fitness Coordinator, a combination of Richard Simmons and Jack LaLlane. Resist getting this job by every means at your disposal. This job as outlined in the instruction is a full-time job for an officer and at least two enlisted assistants. You have too many other things to do. The Command Fitness Coordinator (CFQ) is responsible for performing annual physical fitness testing and seeing that the results are placed in the service records. The CFQ is also responsible for conducting a remedial physical fitness program for those deemed unfit or who fail to meet body fat standards. Even if you are athletically inclined, this, as a collateral duty, can be a nightmare.

If stuck with it, the CFQ is more work than it appears on the surface, so be prepared. Inviting divisional representatives from all over the ship is about the only way to run this program. This gets the entire command involved (as it should be) and takes some of the burden of implementation off the CFQ. **THESE HEALTH PROGRAMS WILL NOT WORK WITHOUT ACTIVE COMMAND SUPPORT.** Don't let the command dump the title on you and then look the other way while you flounder. In the Medical Officer role, you will prescribe exercise programs for those who are overweight, design workouts, and check up on those people with specific limitations, all as part of your medical duties.

Beware! There will be epidemics of musculoskeletal disorders the day before the Physical Fitness testing. Coincidentally, these seem to occur in those crewmembers who need exercise most. They come to Medical because a Medical Officer must excuse them with a medical waiver in order to miss the PRT. A Nobel Prize awaits the discoverer of the nefarious virus that causes this problem. Why it doesn't strike just before liberty call or a shipboard picnic and baseball game is an enigma. If you are certain after an exam that there is no significant pathology, you rehab or motivate these people as appropriate. Helping a slug be a slug does no one any favors.

You are also the diet control officer. You should counsel all obese individuals on weight reduction methods that they can safely accomplish. Weight loss of two to three pounds per week is a proven safe guideline, or they should lose it as fast as they gained it. If properly motivated, most individuals can lose weight at this rate on a 1500 calorie diet. The actual diet prescription will be up to you, of course. Avoid fad diets or recommending those that will cost crew members a lot of money. The idea is for them to lose weight by losing fat, not by losing the lump in their wallets. The dietitian at the hospital is an excellent resource; just write a consult.

Progress should be measured by weekly weigh-ins and a monthly report filed with the CO. Some commands may simply use the body fat percentage method of charting progress, as outlined in OPNAVINST 6110.1 series. Weight monitoring, along with following the percentage body fat on a monthly basis, is recommended because it can be done easily and provides two measurements of progress. Getting rid of excess adipose tissue is serious business. Valuable people are being tossed out of the Navy for lack of body-fat compliance, even if they can perform all of the exercises in the PRT successfully. You may need to aggressively help some people, but don't drop the ball or

let these people slide. Their next duty station might not tolerate their being overweight, even if yours does.

If you are fortunate and escape this job, you will still be involved in the PRT program. Before the PRT is run, you will be asked to review all the PRT screening sheets. By the instruction you are to see anyone who has checked a yes answer. On large ships, that could be several hundred people—more than you can easily see. For those, you should have a questionnaire developed to further screen the yes answers. A healthy 19-year-old who checks that a relative had a heart attack at 45 can be easily screened out with an additional questionnaire. When you first arrive, however, you will be seeing a lot of these people until you get to know their histories; then they will be easier to screen (they check the same yes answers, twice a year). Always put a short note on the patient's SF-600 when you screen someone fit or not fit for the PRT.

As mentioned above, you are the only one who can exempt someone from the PRT test. Use common sense. If a person has a minor injury that does not prevent them from playing basketball, it probably won't prevent them from running the PRT. Also, many people are convinced that, if they have knee or back problems, they don't have to run the PRT. They are partially correct. They don't have to run; they can swim. But they must do one or the other. You will get a chance to educate them. Some people will be much relieved, most won't. You may need to remind the PRT Coordinator that a swim must be offered for those who want it.

Once you have gone through the PRT sheets and declared who is and isn't fit to go, it is a good idea to send a master list to the PRT coordinator of those who cannot run the PRT and why (either medical or obese). NOTE, anyone diagnosed obese, over 25% body fat for men and over 35% body fat for women, cannot run the PRT until they are below those numbers no matter how fast they can run or swim. You are the final say on matters of percent body fat. Measure by the book and to bare skin. For some people that one-half inch makes all the difference between normal and overfat. The Navy is taking body fat and PRT results very seriously and careers are lost on this issue.

Your only other responsibility for the PRT test besides running it and passing it (remember, you have to set the example for your troops) is ensuring that two CPR-trained individuals are present when the PRT is run. These do not have to be corpsmen. It is better to train the two PRT enlisted assistants to be CPR-qualified so they can do it.

WOMEN AT SEA

With almost 20,000 Navy and Marine women serving at sea or in combat-related units as of June 30, 1998, you can expect to treat a variety of OB/GYN complaints. Be sure your spaces are set up for this and your corpsmen are prepared. Women assigned to sea duty are generally young (10% under the age of 20, 60% between 20 and 30) and have the corresponding set of medical issues. Women across the country use medical services more than men, but they may be more compliant with treatment plans, and they certainly get into fewer motorcycle accidents and barroom brawls. Despite the different patterns of need, you must use the same criteria and expectations for both males and females, whether you see them as patients or they serve in your department. Anything else is sexual discrimination – a very serious matter.

Remember, your job is to support the ship and the mission, serving as a force multiplier and morale booster. Your effective treatment of female sailors and officers is a significant part of your positive contribution to morale, ship's function, and overall operations. Since women's service in the military is an important as well as controversial issue, some cases may result in greater scrutiny. Good documentation of evenhanded management is very important. Some of the issues mentioned in the Confidentiality and Leadership sections may arise. Many different people will have legitimate questions and will want to hear that the medical treatment of women is both proper and fair, to the patient and to the crew.

Fortunately, most clinical issues requiring OB/GYN consultation are not emergencies and can safely await the ship's return to port. Then again, some situations require immediate MEDEVAC. Everything that doesn't go out to consult or MEDEVAC will be your daily responsibility in Sick Call. Be prepared: familiarize yourself with your ship's AMMAL and look at the exam space. You may well want to order extra BCPs through your fleet liaison; everyone will appreciate it.

Corpsmen, regardless of gender, should see routine patients, regardless of gender. Get them familiar with the questions to ask and insist that they ask them. If they (or you) must do any sort of intimate exam, the patient or provider may request a standby. BUMED Instruction 6320.83 states that

Patients are to be interviewed and examined in surroundings designed to ensure reasonable visual and auditory privacy. This includes the right to have a person of one's own sex present during certain parts of an examination, treatment, or procedure performed by a health professional of the opposite sex.

The instruction also specifies that each medical treatment facility must have written guidelines on providing standbys, so review yours and make changes if necessary. Standbys can be other patients (sparing your personnel for their own duties), medical department personnel, even chaplains. It may help to have a cadre of people designated and oriented to the responsibilities of a standby and to enter the name of the standby in the medical record.

As many as half of deployed female sailors may have had inadequate Pap screening or follow-up. The most direct means of dealing with this is to simply insist that each female crewmember have an annual Pap smear. Annual Paps are recommended by the American College of Obstetricians and Gynecologists as well as the Canadian Task Force. The incidence of cervical disease may be high, and the outlook for prevention is not very bright, since transmission of the common vector, human papilloma virus, is not readily controlled through the use of condoms or other "safe sex" techniques. Women who are not or have never been sexually active are at very low risk for any cervical disease, so if you make an exception to the annual Pap rule, make a clear note (*Contraceptive Technology*, 1998, p. 51). The Secretary of the Navy has recently reaffirmed US Naval Policy to require an annual Pap smear, pelvic exam, and breast exam of all females within 30 days of their birthday, so add this to your annual tickler.

Prevention of STDs is not a new challenge for the Navy. Among young patients susceptible to occult infections, routine screening for STDs should yield substantial benefits. Annual Pap smear, gonorrhea, and chlamydia screening will detect the bulk of the STDs and prove highly cost-effective. Prevention awareness and effective treatment will go a long way to protect your female patients' health and their future fertility as well.

Reported sexual assault of active duty personnel is a rare event. If it occurs on your watch, your patient care responsibilities take priority over your forensic responsibilities, but both are extremely important. Treat your patient's immediate medical problems first. Provide a trained victim assistant who can stay with the patient and remain free of other responsibilities (training books will be available on the ship). Train your corpsmen and anyone else who's willing to act as victim assistants; this will help raise awareness, too. If at all possible, the assistant should be of the same gender as the victim; this is more important than whether or not they are a corpsman. As many as 25% of sexual assault victims are male, so you may well need both male and female victim assistants.

It has been said that the only thing more psychologically damaging than rape is murder. Sexual assault victims require expert psychological and social intervention. Get your patient to this expertise as soon as possible, even if they say they want to stay with the command, even if it means MEDEVAC, even if the ship loses the sailor. Without acute psychological intervention, assault victims can lose their career, their long-term psychological stability, their lives. Request help from the Navy's local Sexual Assault Response Team (SART).

For evidence collection, follow the guidance in the provided forensic kits. Document everything. Take photographs if possible (with the patient's written permission, of course). Keep the XO and the CO completely informed. Your role here is huge, protecting the patient physically, psychologically, and legally.

As mentioned under Training, pregnancy awareness training is required for all newly reported personnel as well as all crewmembers annually. CINCPACFLTINST 1500.6 outlines what should be included in pregnancy awareness training. This is intended to teach basic reproductive physiology and methods to avoid pregnancy, and it applies to both males and females. It takes two to tango, and everyone needs to remember that sex leads to children. Paternity can affect males more than they think. The instruction also outlines the cost of children and the responsibilities of parents. It is a good idea to have a senior enlisted person who has children do this training.

While it is not the policy of the Navy to discourage pregnancy among the active duty personnel who choose it, it is worth your time and effort to help your patients avoid unintended pregnancy through education and the availability of primary care. The majority of pregnancies throughout the United States are unintended. Many pregnancies in female sailors occur as a result of inadequate contraceptive knowledge, unrealistic estimates of fertility, or misunderstanding of the consequences of pregnancy while in military service. Some women mistakenly believe that if they become pregnant, they will be released from the Navy or their sea-duty assignment will be cancelled (usually it is postponed). Such misunderstandings have serious consequences both for the Naval personnel involved and for the Navy.

Each undesired pregnancy may result in substantial medical disability, temporary re-assignment, and the need for specialty care that is both costly and scarce. Look at your pharmacy supply of hormonal contraceptives and devices and assess your corpsmen's knowledge, experience, and comfort level in dealing with female patients asking for new start or refills on contraceptives. Ignorance and apathy in the Medical Department will not cut it; patients confronted with "I don't know" or "Why should I care" will not likely get the care they came for. It's much more cost-effective to supply BCPs

than to MEDEVAC a suspected ectopic or to lose a sailor to pregnancy leave.

Pregnant sailors perform like any other sailor unless their OB places restrictions on them. OPNAVINST 6000.1A outlines procedures to follow in case of pregnancy and what forms must be filled out. When a crewmember becomes pregnant, she is required to notify you as soon as possible. This does not always happen, so be alert for clinical signs. You calculate the due date, the 20th week, and the current gestational age and put this on a memorandum for the CO via the XO. When underway, pregnant women can go with the ship if you can get them to OB care within 3 hours (i.e., operations in the local area), according to OPNAVINST 6000.1A.

Keep in mind that you must keep pregnancy information as confidential as possible, but the following departments will need to be informed at some point: Personnel (to cut orders); Disbursing (for maternity allotment); and her department head and division officer (so they know of the unplanned loss). Hand-carry this information and file the Medical Department's copy yourself.

In addition, you must have the woman and her division officer complete a Workplace Risk Assessment Form to determine what chemical and work place hazards she is exposed to daily. This form is found in OPNAVINST 6000.1A. You review this, place it in her medical record, and if necessary, refer her to an occupational health professional to determine any exposure restrictions while she is pregnant.

For a normal pregnancy, the sailor will stay on board until the 20th week of pregnancy and then be transferred ashore for delivery. Do not give pregnant sailors light duty unless directed by OB. Within four months of delivery, she will be returned to a ship (not necessarily the same ship) to complete her sea tour.

If a woman decides to terminate her pregnancy, she has that right and must be given leave to do so. Current DoD policy requires that you refer her to the civilian community for the procedure. You can refer her to counselors if she needs it or requests it. After an abortion, you should prescribe one day of bed rest and one week of light duty. If the pregnancy is terminated either electively or spontaneously, you must send a memo to Personnel to inform them that she is no longer pregnant so they can cancel her PCS orders.

Key points from OPNAVINST 6000.1A –

“Pregnancy, by itself, should not restrict tasks normally assigned to servicewomen.”

“No preferential treatment shall be given because of pregnancy status.”

“Requests for separation will not normally be approved.”

“The fertility/pregnancy status will not adversely affect the career pattern of the Navy servicewoman.”

By Instruction (that is, no medical chit needed other than Pregnancy Notification to Commanding Officer), pregnant servicemembers have the following general restrictions:

NO diving	NO weapons training in prone position
NO NBC training	NO PRT or weight standards (+ 6 months)
NO swim quals	NO parade rest >15 minutes
NO drown-proofing	NO immunizations, except DT, or per MO
NO forced PT	NO toxic agents (Industrial Hygiene survey)

When shipboard, must be within 3 hours evacuation capability to an appropriate facility (TAD off ship when going out further) and must be off ship by 20 weeks estimated gestational age and not back on ship until 4 months after birth.

At 28 weeks, 20 minute rest period every 4 hours, and 40 hour work week (covering all 7 days, including all time spent at duty station or in duty status).

At 35 to 38 weeks, light duty begins (medical chit not necessary unless there is a disagreement as to what constitutes light duty).

Details are in the instruction for the aviation community, overseas restrictions, and for waivers to the restrictions. The CO can waive the 40-hour work week if the physician concurs.

A pregnancy servicewoman can:

- Stand watches and work shifts,
- Work until hospitalized for delivery,
- Exercise at a level approved by her physician 3 or more times a week,
- Stand captain's mast and court martial,
- Be placed in brig or restriction,
- Be separated administratively or for misconduct,
- Receive ionizing radiation and radio frequency radiation at the same limits as a non-pregnant person.

Chapter 10, ADDITIONAL ADMINISTRATIVE RESPONSIBILITIES

THE SUPPLY SYSTEM

It would take an entire volume to explain the Navy's supply system. After a year aboard ship, you will probably be more confused than when you first reported. Ignorance may be bliss but, nonetheless, a basic outline of how the system works and your role in it is necessary for your sanity.

This will not be an outline of how to fill out order forms, or which order forms to sign; that can be learned when you get aboard. Besides, it will not be your direct responsibility to do the paperwork for your supply system. Your chiefs and petty officers will be in charge of carrying out these tasks. What you need is an overview, so that you can be a good manager. You need to know where supplies originate, how to get them, and how to scramble if you need something in a hurry!

AMMAL

Of primary importance is the AUTHORIZED MINIMUM MEDICAL ALLOWANCE LIST (AMMAL). Each ship has a specific AMMAL, as well as different AMMALs for different medical requirements (lab, x-ray, females, etc.). All AMMALs are required to be current and complete at all times. There are very important and useful items on this list, as well as some outmoded and useless material.

If your AMMAL is up to snuff, you are fully equipped (officially, on paper) to handle anything that happens as outlined in the ROC (Required Operational Characteristics) and POE (Planned Operating Environment), which define the mission capabilities of your ship. In reality, you will have most of what you really need from a medical and dressing standpoint. You can order additional supplies you deem necessary out of standard Navy supplies without any trouble (as long as you have the money).

AMMALs are updated biannually, and when you get a new one you must incorporate the changes to see what you must order or can delete. Sometimes it will only be a change in NSN number, but you must go through the paperwork drill. In addition to the complete revisions, there is a monthly publication, the Naval Medical/Dental Material Bulletin, which lists interim AMMAL changes. You must review this monthly and have your supply petty officer update the AMMALs from these bulletins. In this review, if you find things that everyone should have or that can be deleted, submit an AMMAL change request at any time to the TYCOM (vessel type commander) for their review. This is your chance to have input in the required stockage list. Rather than criticize, exercise your right to be heard!

NOTE: You must have everything on board or on order that is listed in the AMMAL in the minimum quantities noted. You can have additional amounts and additional items (except for controlled medicinals) if you so please. Simply document these items the same way as the AMMAL items. In other words, you can add to an AMMAL, but you can never subtract from one.

OPERATING TARGET (OPTAR)

Yes, Virginia, money is necessary to obtain all things, including AMMAL items. The mechanism for funding is your department's allocated quarterly Operating Target (OPTAR) from the ship's funds. This is the department operating fund, out of which you buy your supplies. Each ship doles out money to its departments differently, so we can't say how much you will have. You might get more than you need, or find yourself on your hands and knees with a tin cup begging for a few measly coins.

After you receive your OPTAR dollars, you will need to separate the money into two piles. The first is for AMMAL items and all items available through the Navy supply system. The other is the "open purchase" pile to obtain items from vendors outside the Navy supply system. You may buy open purchase if Navy Supply doesn't have what you want and you can demonstrate a need. The ship's Supply Officer must sign all purchase orders, so don't hope to slide through unauthorized items.

Generally, three competitive quotes are required on any open purchase item. The Navy is usually required to buy everything from the lowest bidder who meets your needs (there can be exceptions). This doesn't always apply because sometimes three competitors are not available. You should be able to get whatever you need, provided that: (1) you have the money; (2) you show a need; and (3) you use the system properly. Of course, it won't hurt if the SUPPO is your blood brother!

One unpleasantly surprising secret is that if you don't spend your money, somebody else will! Use quarterly OPTAR money to the fullest by keeping your AMMAL current, your equipment well-maintained, and expired pharmaceuticals rotated and replaced. Money left over is often given to another department, and your next quarter's OPTAR reduced by that amount, unless you talk with the SUPPO ahead of time to explain your situation so that money can be moved into the next quarter. The end of the fiscal year is another story, since unobligated money is lost. Conversely, don't spend your money on junk or waste it because you will be sorry—GUARANTEED.

Prepare an "unfunded requirements" list. These are items you need but that your OPTAR level will not cover. Have the requisitions filled out and sitting in your desk drawer so that at the end of the fiscal year, if funds become available, you can pull out your prepared requisitions to compete for the funds. This demonstrates planning and good resource management versus final hour procurements.

If you budget your money correctly there shouldn't be any problem getting what you need, unless there is an emergency in some other department. At the end of the quarter, you may find you have less money than originally allocated. Look for Engineering to have gotten away with a handful because of some relatively minor but expensive repairs.

Learn how ordering is accomplished from your chief or LPO. Most chiefs have the supply system down pat and can show you a few tricks. They can be magicians in the barter trade system of getting what you need on short notice by trading something worthless for something useful. Of course, this is only for those rare occasions when the regular supply system doesn't work, since it is technically illegal.

One guidebook you should be sure you have at hand, or have access to, is the MILSTRIP HANDBOOK (NAVSUP Publication #409). MILSTRIP stands for Military Standard Requisitioning and Issue Procedures. This handbook outlines codes and numerical systems that need to be deciphered when dealing with message traffic concerning supply items and order forms. Be aware of it, but you only need to be concerned with the codes on order forms. Knowing some of the codes or their function can certainly benefit your department. For instance, use the proper code for shelf-life items—the right code will get you the supplies with the longest expiration date—so you don't have to restock the BDSs and PMLs (prescription medicine lockers) so often.

SUPPLY

Ordering an item from Supply appears simple. And for computerized ships, the information is entered into your desk terminal and simply transmitted to Supply. For ships that aren't computerized, read on. The first step is to find the Navy Stock Number (NSN) for the item. Once that is known, filling out the 1250 order form is easy. The 1250 is signed by the division officer or department head and sent to the Supply office.

Supply checks the OPTAR fund (to make sure you aren't overdrawn on your account), approves the order, and sends it through channels. Once the shipment arrives (which can take anywhere from one week to thirty years), a pink copy of the 1250 is kept on file by your supply petty officer and deducted from your OPTAR LOG. Sounds easy, doesn't it? You should be keeping an OPTAR LOG, like a checkbook, just to keep everyone on track and up to speed. More on this later.

Note: Stock numbers and units of issue are critical components of the requisition. One wrong number can mean the difference between an aviation part and a bandage, or a box of something versus a pallet. This can have a profound effect on your OPTAR because you will be charged for the item received, not the item that you intended to order. Also, do not abuse the "urgency of need" and "priority designation" system. Your requisitions are being monitored, so have sound supply discipline. Of course, the month before deployment, you **can** and should use the high priority codes, so that supplies are not left at the pier.

Well, it isn't as easy as this. Don't relax when the request leaves your office. There are enough offices and people with their hands on an order that it can get stalled or jammed at multiple points. Use your tickler system and be politely aggressive about checking the progress of important items. No news is not always good news, and you can't be sure you'll be notified of a hang-up. You must keep track of your orders yourself. Discovering that an order for Ceftriaxone has been sitting on a clerk's desk for six months, or canceled because it was not in stock, can be irritating, especially if you discover it the night you pull into Port Venereal for 72 hours of rest and recreation.

Your supply petty officer should keep a running log of all expenditures in an OPTAR LOG. At the beginning of each quarter, you will get an OPTAR for that quarter. The log should total all expenditures against the OPTAR balance as you spend it. At the end of each quarter, debits and credits should be reconciled (just like balancing a checkbook), and any money left carries over to the next quarter. At times, your figures will not coincide with what Supply says you have because money was siphoned off for some

other department. The only way to prove that you haven't overspent is to keep accurate records.

Make sure your OPTAR LOG is run on a quarterly basis, not yearly, and is balanced at the end of each quarter. Otherwise, you may find yourself short of money at the end of the year!

Even with careful management of your budget, there will be times when you run out of money for the year and you still need to buy something vital, like influenza vaccine. Take heart, there is a way. You should start by talking to the SUPPO and explaining your situation. The SUPPO knows where all the money is and who has what left. If anyone has any money, the SUPPO can let you know who it is. You then submit a request to the CO through the SUPPO explaining why you need another department's money. If there is any money on board and you have a vital medical need for it, like flu vaccine, and there are no higher priorities for that money, like fixing the engine, the CO is required by regulations to give it to you.

One of those last resort accounts, if you do find yourself strapped, is the XO's and CO's reserve fund. It is not widely known by Medical Officers that the XO and the CO each have a share of the OPTAR money in a reserve fund for use as they see fit in an emergency. If you have a medical supply emergency, you can appeal to either of them. If there is absolutely no money on board, then the SUPPO can appeal to COMNAVSURFLANT/PAC for additional funds. They usually have some money left.

It is important to note that in these increasingly tight fiscal times ships are expected to live within their budgets. You must be extremely cautious with your funds, because the fleet is continually being asked to do more with less. Again, it cannot be stressed enough that you must keep a tight rein on your department's purse strings and monitor where the money is being spent. You must really try to live within your budget and not allow your account to be overdrawn.

OPEN PURCHASE

When ordering "open purchase" (outside the Navy supply system), make sure you get the Supply Department involved BEFORE you buy. Only Supply can approve open purchase requests. Supply prepares the purchase order for the vendor from whom you wish to buy.

DO NOT, under any circumstances, order anything yourself and expect to be reimbursed. You may get reimbursed, and you may not, and, therefore, have to pay for it yourself. In order to try to get reimbursed for an unauthorized open purchase, you must submit a detailed letter to Supply with the CO's endorsement stating what you purchased and why you had to open purchase this item without going through the proper channels. Essentially you have to beg forgiveness and promise never to do something like this again. Be prepared for the fact that it may not work (if a legitimate, urgent need exists and the item is not standard stock, there is a very good chance that you will eventually be reimbursed).

Don't try to order open purchase items without going through Supply unless you are desperate, and, even then, ask Supply for help first. They actually can perform miracles

in an emergency, and it doesn't hurt to stay on their good side. Again, the rules are very clear and strict on ordering open purchase items. Supply must initiate all orders for anything concerning the ship. If there is any doubt, check with the Supply officer.

ROUTINE SUPPLIES

When supplies arrive, check them as soon as possible to make sure they are what you ordered. Your corpsmen may not always be familiar with some things, such as surgical instruments, that you have ordered. If you don't check to make sure shipments contain what you ordered, you may end up trying to sew someone up with a pair of pliers.

It is helpful to have a supply petty officer regularly inform you of what supplies have arrived. It is helpful to keep up-to-date on medications received and to know what can be prescribed from day to day. It is infuriating to be unable to prescribe a certain medication because you believe it is out of stock when, in reality, it was in stock for the past three months but no one mentioned it. If your supply system runs the way it is supposed to, you will never have the problem of running out of supplies. When inventories get low, items will be reordered and arrive in a timely fashion. However, unexpected medical emergencies or disease outbreaks can cause you to run out, or, sometimes, supplies are delayed in arriving. Forewarned is forearmed.

When contacted by Supply, make sure your supplies are picked up promptly. If you don't pick them up promptly, Supply may stash them in one of their storerooms and they may never be found. All you will see on their records is "on board, unable to locate," thus making it difficult for you to reorder and even more difficult for you to treat patients. This is usually only a problem if you get a small box of something; for several boxes, Supply will generally contact you to make sure that your supply petty officer picks up your supplies. Supply also has limited storage space and doesn't like to keep items sitting on its shelves waiting to be claimed.

DEFECTIVE SUPPLIES

If you receive equipment or supplies that are expired or defective, don't use them. If you receive expired medicine, first check the NMDMB and any recent Supply message traffic to see if that lot's expiration date has been extended. If it has not, then send a priority message to the Defense Personnel Support Center/Directorate of Medical Material. This must be followed by a written report on a DD-1899 (Reporting and Processing Medical Material Complaints), all IAW BUMEDINST 6710-63, with a copy to your TYCOM.

Again, this is your way of being heard. Plus, it is the official method of purging "the system" of junk and trash. If you don't tell the system it goofed, it thinks you are happy or like the item, and you will receive the same wrong goods the next time you order.

If you have a problem with defective equipment, you must make sure it is certified defective, usually by a biomed repair technician. Then, complete the same report listed above, with an additional copy going to both the Naval Medical Logistics Command and the Defense Medical Material Board, Fort Detrick, Frederick, MD 21702-5013.

SAC 207 ACCOUNT

This is a special medical supply account located on large support ships (LHAs, LHDs, tenders, and supply ships). The intent is for these large ships to have additional ready supplies of medical material for their own use as well as for ships that they support. The SAC 207 account contains an entire ship's AMMAL (minus durable equipment), in an account totally separate from the Medical Department's. The idea is that your orders will first be filled from the SAC 207 account and the SAC 207 account automatically restocked, thus ensuring that there will always be complete AMMAL on board.

See who manages the SAC 207 account. If it is the Medical Department, you are in trouble. Turf the SAC 207 to the Supply Department as fast as you can; it's their baby. COMNAVSURFPAC 6000.1 series, as well as Supply's governing instructions, state in no uncertain terms that the Supply Department WILL manage this account. Work hard to see that it does. Because you are required to do quality control on the SAC 207 pharmaceuticals, under NO circumstances do you want to retain control of the SAC 207 account – it's like the fox guarding the chicken coop. Additionally, there are conflicts of interest with controlled substances and expensive equipment items. Furthermore, you and your people have limited supply experience and training, nor do you have the manpower to dedicate at least two of your best people to do supply full time, just to stay on track. Don't let this one hang on. If Medical has the SAC 207 account, get rid of it.

If the Supply Department is already managing the SAC 207 account, you just have to manage one AMMAL, yours, which can be difficult enough in itself. There are some methods to keep your inventory down. You can keep some of your AMMAL in the SAC 207 account. Do this with items that are expensive and unlikely to be used, e.g., your CBR drugs. This saves your OPTAR, and they are on board when you need them. If you are on a ship that does not have a SAC 207 account, it is still a valuable resource for you. You can go shopping on them for medical items you need. You make sure you have money, fill out the 1250, and (after checking to see how your Supply Department wants to do it), go shopping from the SAC 207 account. They should have the supplies you need to restock your AMMAL. Realize that the SAC 207 amounts are usually limited to what the AMMAL limits are. Of course, you can stock any amount you like above the AMMAL limits, provided you have the money and storage space.

NARCOTICS

Narcotic shipments, theoretically, should be received by the bulk custodian or working stock custodian and immediately stored in the bulk safe. This will not always be the case, depending on the bulk custodian's other duties and where someone is when the shipment arrives. When receiving such a shipment, have one of those designated people sign for it personally. If they can't, then have your senior Medical Department representative, either the chief or the LPO, sign for and secure it until the bulk custodian can store it properly. Do not sign for any controlled medications unless there is no one else who can do it. This will protect you from suspicion should drugs turn up missing at a later date. When it comes to drug abuse, the Navy takes a very hard stand. Keep yourself completely above suspicion by being careful, proper, and as thorough as possible. (More on this under Prescriptions.)

As mentioned before, this is the only portion of the AMMAL that you can make no changes or substitutions for. You can only carry the controlled medicinals listed on the AMMAL and only in the quantities stated. You can't go over and you can't go under (must show item on reorder). Don't even think that you can get away with ordering non-AMMAL items or unusual quantities because the system tracks all controlled substances and they are reported to your CO/TYCOM for monitoring. This is very serious business and a very serious program. Make sure your paperwork is perfect! Otherwise you can look forward to many long chats with NIS investigators.

MEDICAL EQUIPMENT PURCHASES

Medical equipment items that cost over \$5,000—X-ray machines, whirlpools, operating room tables, etc. —are managed through a central funding system. If you want an item that is expensive, you need to put your order in at least a year in advance. Even then, you may not see the equipment you ordered, but your relief is COUNTING ON YOU to look out for the department.

These purchases do NOT come out of your OPTAR. They are centrally purchased and separately funded. To plan for large ticket purchases, you must maintain a listing of all your equipment and their life expectancies. This is maintained as part of the 3M system (more on this later). When equipment reaches the end of its life expectancy and is no longer usable, the biomedical repair techs certify this and permit it to be surveyed. You can then order a new one.

To further track your equipment needs, you must submit your medical equipment requirements (those over \$5,000), through the chain of command to the TYCOM by 01 MAY every year. The reporting requirements are spelled out very nicely in BUMEDINST 4235.7 series. This same instruction tells you how to request an emergency equipment purchase, i.e., if a vital piece of equipment breaks and can't be fixed. Also, items that are under the \$5,000 ceiling come out of your OPTAR and must be budgeted.

EMERGENCY EQUIPMENT AND SUPPLIES

In addition to the equipment in the BDSs, there is emergency equipment in portable medical lockers, first aid boxes, boat boxes, gun bags, corpsman response bags, and stretchers. Every piece of emergency equipment is located in a specifically designated location, outlined in the Medical Department's Battle Bill (another instruction you need to make sure is in place). Each piece of emergency equipment comes with an AMMAL stating exactly what items are present and the quantities required. For the BDSs and other emergency equipment, the AMMAL requirements are sufficient, but you can always augment them as you see fit and if your budget allows.

All emergency items must be inventoried quarterly. This is a Medical Department evolution. There are many ways to accomplish the inventory, but putting different corpsmen in charge of different items seems to work best. Your supply petty officer has the AMMALs and keeps the master list once the inventory is complete. Each item—e.g., a first aid box—has an inventory AMMAL inside. These must contain the location of the equipment (tack number of the space), and the inventory list must be signed and dated by the person who performed the inventory. When they are done, the outside of the item

must be sealed and labeled with a “do not tamper” seal, which is also signed and dated by the person who did the inventory. After that is done, they must sign the master inventory list maintained by the supply petty officer. It is a good idea for you or your senior khakis to spot check the equipment (particularly first aid boxes) to ensure accuracy of the inventories.

Also in your travels about the ship, it is a good idea to inspect the first aid boxes specifically looking for tampering, to see if they need replacement or re-inventory. The NSN (stock number) on the AMMAL list must match the NSN on the item in the emergency equipment. If the NSNs do not match, but they are descriptively the same—e.g., both 7 ¼ inch bandage scissors—then write in the correct NSN for the item and put a star next to the NSN on the AMMAL list.

CONTINGENCY SUPPLIES

A number of storerooms located in various parts of the ship are designated for your medical supplies and equipment. Some of these will be readily accessible from your medical spaces; others will be so out of the way they require a navigational chart and sextant to find. One of the first things you should definitely do during the turnover time with your predecessor is to get a tour of all the Medical Department spaces, including the storerooms. This will not only better acquaint you with the ship in general but will allow you to find supplies later. The first time you venture out on your own, leave a trail of breadcrumbs.

Another good reason for touring the storerooms is to get a visual idea of the material for which your department is responsible. You will be pleasantly surprised by the abundance of supplies at your disposal. Some of it will be unavailable for every day Sick Call. There should be gynecological instruments and empty bottles (by the thousands). Most of this equipment is earmarked for disaster relief or evacuation of civilians during wartime operations. You will also find some miscellaneous items you’ve never heard of and others you thought you would never see.

It is a good idea to inspect the storerooms throughout the year to see that spaces are kept neat and clean, properly stocked, and in good condition. You will occasionally find surprises: personal gear belonging to corpsmen, bicycles, radios, tapes, woodcarvings and various other souvenirs purchased at foreign ports. Make sure non-medical items are removed.

One important supply function is stocking the Medical Officer Response Kit, which is normally kept in the designated trauma area. These are often overlooked by the corpsmen who update medicinals and during preventive maintenance of equipment. This bag should hold most medications necessary for advanced cardiac life support and trauma situations. At least once a month you should inspect the kit, checking the dates of all medications and replacing those that have expired. If your chief and LPO are on their toes, this will be done for you automatically, but don’t assume that it will be. You don’t want to get caught short in a true emergency.

Other than AMMAL items and supplies, ordering any additional medical supplies will be up to your personal preferences. Keep in mind that the AMMALs cover almost everything that you will need to supply your Medical Department. They contain all the

basic materials, including a wide variety of cold medications, anti-inflammatories, antibiotics (both PO and IV), some plaster for rolling casts, metal splints for fingers, and a variety of suture material and needles. The department AMMAL also includes professional books. The TYCOMs have a list of required books, publications and instructions you must maintain on board. Anything else you want is up to you.

When you get on board, look over the AMMALs and talk to the person you are relieving about what may be missing. You can then decide what medications and items you simply cannot live without and order appropriately. While you can order anything that you have money for, be cautious with ordering non-AMMAL items.

The AMMALs are intended to be standard minimal types of supplies that you will need as a GMO on a ship. AMMALs were developed as consensus standards by panels of Medical Officers, are intended to cover the types of contingencies you can expect to face, and should supply the needs for what you expect to treat on your type of ship. They will not and should not replace what is available in the local hospital.

Don't waste your OPTAR on the latest and greatest medications, when the older, more cost-effective medications work just as well. If you have only one or two patients on a "special" non-AMMAL medication, have their doctor at the hospital write prescriptions to be filled at the hospital pharmacy. The shore-based docs are usually very good about giving the patient enough medication for a deployment as long as you ask. A penny saved may save your bacon at the end of the quarter.

A few words on AMMAL limits. The AMMAL levels are conservative, low quantities. For medications and supplies not often used, they are fine, e.g., antihypertensive medications, and surgical instruments. But for commonly used medications like antibiotics, OTC cold medications, non-steroidals, birth control pills, antifungals, antiemetics, and sunscreen, they can be woefully short. Discuss your ship's dispensing history with your pharmacy tech and the person you are relieving. Then you will have an idea what medications you may need in higher quantities.

Keep in mind that you are the corner drugstore for the crew, since the ship's store can't sell medication. Realize also that some medications are seasonal. You may need to order more cold medicines during cold and flu season and more antifungals and non-steroidals during hot weather and sports tournaments. The AMMALs are planned for the same numbers year round. You have to plan two to three months in advance to ensure your order makes it through the supply system.

MAINTENANCE AND REPAIR (3M PMS)

The 3M system will initially seem to defy logic and be as exciting as watching paint dry, but it is important for you to understand and make sure it is properly implemented. There really is logic and purpose to it, and the 3M system will work. Just give it a chance; it's not that hard.

Some basic facts about the 3M system (for excruciatingly complete details see OPNAVINST 4790.4B Ship's Maintenance and Material Management [3M] Manual). Every piece of equipment on the ship, and most of the equipment in Medical, has scheduled preventive maintenance that must be performed to keep that equipment at its

peak operating standard. This is particularly important for emergency equipment or equipment that is rarely used. The system forces you to look at your equipment on a regularly prescribed basis, so it doesn't sit in a storeroom and rust to pieces.

Each work center has a list of the equipment that requires preventive maintenance, called a List of Effective Pages or LOEP. There are Maintenance Requirement Cards (MRCs) for each piece of equipment on the LOEP, which state what maintenance is to be done. This MRC card states:

- how often maintenance is required (weekly, monthly, etc.),
- who can perform the maintenance (some of yours can only be completed by a biomedical repair technician),
- other maintenance can be completed by any corpsman),
- how long the job will take,
- what supplies and equipment are needed to do the maintenance (a bucket, soap and water, etc.), and
- how to carry out the maintenance (with detailed, step-by-step instructions).

This is something you and every one of your people need to know how to do.

If you do not have an MRC card for a particular piece of equipment, you must submit a Feedback Report (FBR) OPNAV 4790/7B, to the ship's 3M Coordinator (see below). This request goes to the Navy's 3M center, who then send the MRC card to you and add that item to your departmental equipment list (LOEP). You will definitely need to do this for any new piece of equipment you receive.

3M and Damage Control are two areas that every person stationed on board a ship must get qualified in. For 3M, there are six levels. What is described above is a 3M 301 Basic Maintenance Person, a qualification everyone on the ship must have within six months of reporting on board. (See Training.)

3M 302 is the Work Center Supervisor, required for E-5s and above. This includes learning how to prepare the weekly schedule of PMS and to do spot checks. Spot checks are something you and your division officer will do weekly. You will complete a check of three pieces of equipment on which preventive maintenance was done that week, and your division officer will do one. When you do a spot check, you are supposed to watch the person who has performed the maintenance actually do the maintenance again. The intent is to ensure that the maintenance is actually being done and not falsely documented ("gun-decked" in the fleet) and that the person really knows how to do the PMS.

3M 303 (Division Officer) is required for all E-7s and above. Here is where you learn how to create the maintenance schedules and cycle boards that are mentioned below. There is an art to this and some common sense. Obviously, don't schedule all maintenance for the end of the year (you run the risk of not being able to do it), or schedule it for when half the department is on leave, etc. In addition, there is a 3M, Admin and Ops course that all khakis are strongly encouraged to attend. This course is given off the ship, and your Admin Department can help you with scheduling.

3M 305 (Department Head) is required for you and simply reviews 3M 303 to make sure you really do understand enough of what you are signing. 304 is a Departmental 3M Assistant, and one of your senior enlisted people should have this qualification so that

your 3M program can run smoothly, but this is not required. 3M 306 is a 3M Coordinator and Inspector, who is able to go out and perform 3M inspections and assist visits on other departments and ships. If you are on a tender, one of your chiefs will probably have this qualification, but no one is required to do this one either.

1. **The Cycle Schedule:** Used for long-term planning, which is the responsibility of the department head. It deals with scheduling the preventive maintenance for the year by quarters for every piece of equipment you own. You review and sign a new one every year or each time it is rewritten.
2. **The Quarterly Schedule:** Breaks the cycle schedule down for the preventive maintenance to be completed monthly for each quarter of the fiscal year. This is also your responsibility to review and sign each quarter or each time it is rewritten.
3. **The Weekly Schedule:** The responsibility of the division officer. The LCPO, who is the work center supervisor, usually makes up the schedule for PMS checks for the week with the department head and division officer's approval. Each week the schedule is submitted to the division officer or department head for signature, listing all preventive maintenance and checks to be done that week. These weekly schedules should accomplish everything promulgated in the quarterly schedule and ensure that all pieces of equipment have had their scheduled preventive maintenance by the end of the year.

Submit internal work requests to the department head of the work center doing the actual repair work when you find any equipment or areas with discrepancies requiring repair. Your work center supervisor should keep copies. By properly using the preventive maintenance system, your department can maintain maximum operability. It is important for the Medical Officer to note the maintenance schedules on a weekly and monthly basis to check for planned maintenance. Before signing any 3M PMS schedules, be certain you know what was inspected and that the job was done properly. Usually the LPO will have done this for you and you need do nothing more than check off the areas that were inspected or repaired.

Soon after you arrive on board ship, have the chief go over the system with you in vivid detail. You can get confused by the checkmarks, X's, and numbers you will find on these sheets; they will have no meaning until you understand how they correspond to areas and pieces of equipment. Although initially confusing, this system is very worthwhile.

Each ship has a 3M Coordinator in charge of collecting and collating all reports from every department. The Coordinator is the ship's expert on 3M and a good reference point for you. Any questions you may have should be referred there.

One of the reports collected, and one that is your responsibility to submit, is the weekly report of PMS. This lists the numbers of all PMS scheduled for the week and the numbers actually accomplished that week. A word to the wise - those two numbers should always match and be 100%. The percentage of PMS done is important for the ship on its annual command inspection.

Remember—the more you support line programs, the more the line will support your programs. The PMS report also lists the number of department head and division officer

spot checks scheduled and completed as well as the completed spot check form (it's a check-off one). Again all of the numbers should match and be 100%. This is a program that is easy to let slide if you do not insist that it is completed and documented as required by instructions. This must show up on your list of things to do each week. You're probably getting the idea that this list is pretty long.

MEDICAL 3M

In addition to the 3M system outlined above, medical equipment has some additional requirements. Every piece of medical equipment must have a NAVMED 6700/3 (Medical/Dental Equipment Maintenance Record) completed. Attached to the NAVMED 6700/3 will be a copy of the equipment's spare parts listing. This spare parts listing will be included with your AMMAL lists, and you must maintain 100% of your required spare parts on board/on order. In the foreseeable future, spare parts will be COSAL (Consolidated Supply and Allowance List) supported, which means they will be in the Navy's routine supply system, as opposed to now, where almost every spare part is a special order.

Each time unplanned maintenance or a biomed-safety check is done on a piece of medical equipment, it must be recorded on the NAVMED 6700/3. Repairs and planned maintenance must also be noted on the OPNAV 4790/2K for documentation and entry into the 3M system. You must submit copies of all your NAVMED 6700/3s via the chain of command to the TYCOM annually.

You must also have a biomedical repair technician perform maintenance/safety checks on all life saving/supporting medical equipment quarterly.

FIRE STATION MAINTENANCE (DAMAGE CONTROL)

Next only to an explosion, fire is the most feared event on a ship. The ship spends hours each month practicing fire drills, fire fighting techniques, and personal safety during fires. Sailors are sent to fire fighting schools specifically to learn how to manage shipboard fires. With the amount of fuel and other combustible materials carried aboard most Navy ships, a fire out of control can quickly sink you.

Damage Control is an ALL HANDS responsibility. All crewmembers are required to be qualified in Basic Damage Control (DC-2) and Advanced Damage Control (DC-3). One person from each division is required to be DC-5 (Damage Control Petty Officer) qualified. Ideally, all crewmembers will attend a two-day shipboard fire fighting school off the ship, but this is not always possible. Try to get billets for your people to attend, but realize that fire party members will get higher priority. Your corpsmen will need to screen the records for everyone attending fire fighting school to look for disqualifying conditions. There is a message and an instruction that explains what to look for and what are absolutely disqualifying conditions (pregnant, acute URI, etc.). There is also an aircraft fire fighting school that flight deck corpsmen and alternates need to attend. The First Lieutenant or Air Boss schedules those billets.

Each division DCPO (Damage Control Petty Officer) is responsible for maintaining both the fire stations and related damage control equipment. You need to be sure the person

assigned from your department stays on top of things. The DCPO should identify equipment that is broken or otherwise inoperative and take steps for repair. If it is a major repair, an internal work request should be sent to Engineering for action. Your department LPO or chief will acquaint you with these areas, if you ask. ASK! Again, this is a command priority program.

One of the more important duties of your DCPO is to inspect your fire station weekly. The hoses, clamps, sprayers, and valves must all be in perfect working order and ready at a moment's notice. A report is filled out with grades of satisfactory or unsatisfactory, which you must sign and turn into the damage control assistant (DCA). Any problems noted should be immediately reported and corrected. The worst thing that can happen is a fire in a space without a working fire station!

Make sure weekly fire station PMS is done. There is a weekly report of DC PMS and spot checks scheduled and accomplished (these are assigned by the DCA). Even more important than the 3M system, it is essential that the DC PMS be accomplished when scheduled. These numbers also need to match, and, again, should be 100%. This area is included on the command inspection and is another chance for you to do your part. This is another area requiring your weekly interest.

Chapter 11, ADMINISTRATIVE VERSUS BATTLE ORGANIZATION

The organizational structure in the Shipboard Organization chapter reflects routine, day-to-day activities. This changes drastically under battle conditions and special evolutions (Condition 1 alpha, flight quarters, fire drill, mass casualties, etc.). A Watch, Quarter, and Station Bill is posted in each department to outline the responsibilities of each person in your department for all specific evolutions (for example, flight deck corpsmen at flight quarters or boat corpsmen for the Search and Rescue team when someone goes overboard). The Watch, Quarter, and Station Bill also contains each person's berthing assignment, workstation, and lifeboat assignment, as well as every crewmember's location for special evolutions and different readiness conditions. This must be kept as accurately as possible, and your people must know their assignments.

It is a good idea to quiz them periodically, especially when the ship practices abandon ship, to make sure they know their lifeboat assignments. You should also make sure that your people are assigned to different berthing compartments as well as different lifeboats. It is very easy for your people to all be in the same berthing compartment or lifeboats like other divisions, but this can have disastrous consequences in a real emergency (e.g., a fire in the berthing compartment where all medical personnel live).

Under battle situations, the chain of command may differ as people come into different areas for a specific duty. You must be familiar with personnel that you obtain from these sources (i.e., phone talkers at the battle dressing stations). You are responsible for ensuring that the BDSs, the decontamination stations (usually only one is manned), and the repair parties are properly manned with medical personnel and stretcher bearers. You need at least 2 stretcher bearers at each BDS, decon station, and repair locker (4 are ideal). Dividing the corpsmen and dental techs (they are used like corpsmen in a battle situation) among your BDSs (usually three) is the normal manning situation. You will also need two phone talkers at each BDS, one for each sound-powered phone line. It is also a good idea to station a person in Damage Control Central to track medical casualties (more on this later).

A word on stretcher bearers. They are usually deck personnel and not often the smartest or the most cooperative ones (those went to the fire parties). You are responsible for molding these people into trained first aid providers. At times this may seem an impossible task. The COMNAVSURFLANT/PAC instruction contains lesson plans for first aid. Also, the Fleet Training Groups and FXP-4 will give you the grading sheets that are used for each graded exercise. Use them to train your stretcher bearers and crew to administer first aid the way the inspectors want. The instruction is very rigid, not open to interpretation, and ideally suited to non-medical people. All you can do is practice and practice until your stretcher bearers can do first aid in their sleep. Then you will be amazed at what they can do when given the opportunity.

The ship's manning document (in Admin) will outline, for every single soul aboard, where everybody should be for each situation. Refer to it if you have trouble. If you don't familiarize yourself with it, other departments will steal your people and offer no one in return. Hardly a fair situation....

You can expect to provide corpsmen for the following evolutions: man overboard (one to the rescue boat and one to the foc'sle); underway replenishment (one for each refueling

or rigged station); flight quarters (one to the flight deck and one to the rescue boat); one for the rescue and assistance detail; one to bow anchor for towing evolutions; one for gun shoots; and one for the fire party.

For ships with nuclear weapons, nuclear reactors, or nuclear material handling capabilities, there will be nuclear spill or damaged nuclear weapons drills. This is a drill where you get to play. You usually provide one corpsman to the scene in appropriate anti-contamination clothing (anti-c's), one to the fire party, one to the decontamination station with the Radiation Health Officer (if you have one), and you and several other corpsmen to the BDS designated to receive contaminated casualties. It is rarely the Main BDS (Sick Bay), since you wouldn't want to contaminate that area. At your station, you will need a phone talker, a recorder, a nuclear-trained person with a radiac (a Geiger counter that measures contamination levels), and two to three corpsmen to assist you with treatment and decontamination (non-injured contaminated personnel are decontaminated by non-medical personnel). As you can see, this type of evolution takes almost your whole department.

NAVMEDCOMINST 470.10 is a very detailed instruction explaining the treatment of contaminated injured personnel. If your ship does these drills, you will need to become very familiar with this instruction, as YOU will be tested on your knowledge and expertise during an inspection. Always remember that life and limb-threatening injuries are treated before you decontaminate someone. (See also Inspections.)

NUCLEAR, BIOLOGICAL, CHEMICAL DEFENSE

Nuclear, biological, and chemical warfare is an area that had been neglected until the middle 90s. Much has changed since that point. We now recognize that, in 1998, no country on the planet can challenge us force-against-force. We're too big, too strong, and too rich. The only option, then, for a country with a grudge against us, is to use an "asymmetric" style of warfare. With an eye to our imposing size and power, our future opponents will likely fight with cheap and portable weapons, from hidden locations, and sometimes as small groups with no backing from a recognized nation. And they'll likely fight on land, though probably within 100 miles of a coast (where 70% of the world's people now live).

That threat completely changes the way the Navy must do business and reflects a profound world shift after the loss of our Cold War opponent. The result has been a rethinking of our response plans into a more beach-oriented style of warfare. The fundamental doctrine for this is called "Operational Maneuver from the Sea" (OMFTS), and it says that we'll do most of our work close to the beach, working with Marines.

A part of OMFTS says we'll have to prepare for chemical warfare, and we've recently seen chemicals used by other nations against their opponents. Another part says we will see biological agents, and there is now good evidence that weaponized biological agents exist in the world. And last, industrial and medical radiation sources pose an extreme health hazard in countries once relatively wealthy, but now decimated by war. There have been several documented incidences of radiological terrorism injuring, and killing, unsuspecting victims. Radioactive sources can come from a simple cancer teletherapy unit in any hospital or from any shipyard.

Our basic cultural distaste for this type of warfare has made our defense woefully inadequate from a medical standpoint. Not enough emphasis is placed on properly training personnel to deal with radiation risks, chemical warfare, and natural disasters. A critically important tenet of medical defense during NBC warfare is the ensuring of proper decontamination procedures BEFORE the treatment of injuries. Medical Department personnel cannot care for contaminated personnel. Contaminated medics are useless to everyone; heroic medics are dead. All of your personnel should be thoroughly drilled in the concept of **SELF-PROTECTION FIRST!**

Proper protection—in the form of masks, coveralls, gloves, etc.—should be, but unfortunately often is not, readily available for everyone. Training in the use of protective masks should be an integral part of your department, as well as shipwide, military training. Your people may be in charge of the decontamination stations for both chemical and radiological casualties (it is better if damage control personnel are in charge of decontamination), and the procedures to follow are slightly different for each type of casualty. For details of decontamination and casualty procedures, refer to the NBC Defense Protocol found in pertinent SURFLANT/PAC instructions and also BUMEDINST 6471.10.

BATTLE DRESSING STATIONS

Battle dressing stations (BDSs) will be located in different areas of the ship. At present, the ships designed to best receive shore and air evacuations are, in order of preference: LHAs, LHDs, LPHs, LPDs, LSDs and LSTs. These are all amphibious warfare ships and are designed for carrying large numbers of people. If you are assigned to one of these ships, be especially prepared for mass casualty drills and assignments. Other ships that may be designated to receive casualties, in order of preference, are CVs, ADs, ASs, and ships with Medical Officers. On these, you will deal with the great good fortune of being required to plan for mass casualty treatment and triage on a ship not well designed for it. Keep in mind that all ships can be confronted with a “ship-generated” mass casualty, e.g., a boiler explosion. Ships are routinely dangerous environments and do not need battle conditions to generate severe casualties.

Each battle dressing station has a medical locker supplied with dressings, surgical instruments, sutures, IV fluid bags, catheters and tubing, splints, and even portable sterilizers. You will find an operating table with overhead lights and extra stretchers. A potable water tank with emergency fresh water is usually overhead. This tank must have the water checked for chlorine residuals and bacteriological counts monthly and be drained and refilled every three months. A list of required material for each BDS is listed in the AMMALS in the COMNAVSURFLANT/PAC instructions.

Often the biggest problem is getting patients to the treatment areas. BDSs are located sufficiently far from where casualties come aboard to make transportation a nightmare. The main Sick Bay is the most acceptable, but it may be unable to handle the entire load of casualties. Getting patients to battle dressing areas requires navigational skills, strength, and determination on the part of stretcher bearers.

MASS CASUALTY

The battle dressing stations are designed for intra-shipboard mass casualties, not really for treating external casualties (except perhaps in the case of the LHAs and LHDs). A BDS can take care of most minor surgical problems but lacks X-ray and major surgical capacity, with the exception of the main BDS if that is also your Sick Bay.

If one is not in place, you must have a mass casualty bill. For go-bys of how to write required instructions, see COMNAVSURFLANT/PACINST 6000.1 series. The mass casualty bill will list the medical responses, casualty receiving and treatment areas, and casualty evacuation routes for each mass casualty scenario. This is tailored to your ship's capabilities and is different for each type of scenario. Casualties are received in different areas depending on how they arrive (by sea/land/air); casualty treatment areas are different if the ship is at General Quarters versus just receiving casualties. COMNAVSURFLANT/PAC require that mass casualty drills be completed and graded quarterly. If you plan your drills appropriately, you can test all the scenarios that you have devised. **It cannot be stressed enough to actually DO the drills for each scenario so that you can find the problems during the drill and not the real thing.** An example of information that you would like to know ahead of time would be if you have a problem with stretchers not fitting through the door of your designated casualty treatment area. If your predecessor has a Mass Casualty Bill in place, all the scenarios should have been tested to work out the bugs, but don't put your trust in that. Go through the drills so you can see what the situation is for yourself and your people get comfortable with the routes and locations. There isn't time to read the instruction in an actual mass casualty situation.

In addition, you need to make sure there are provisions for setting up intensive care monitoring and ward care for the injured. You must also make sure that charts and records are accurate and maintained, that you have procedures for removing weapons and valuables from patients safely, that adequate security is maintained on controlled medicinals broken out for use, and that arrangements have been made for MEDEVACing casualties requiring additional care. If patients have died, you must have provisions for storing their remains. (Refer to the Decedent Affairs Manual, NAVMEDCOMINST 5360.1.) As you can see, there is a lot to plan for ahead of time.

When a mass casualty drill or situation is imminent, the word will be passed, "Ready to receive casualties, man all battle dressing stations." At this point, each BDS will be manned in accordance with the Watch, Quarter, and Station Bill. The corpsmen, assorted phone talkers, and stretcher bearers will man their stations. The Medical Officer will be in the main battle dressing station area, and the next senior Medical Department representative will man the main triage area. If Dental Officers are assigned, the senior Dental Officer will usually be the triage officer, though it should be your best surgeon, at least initially. All dentists are trained in ATLS prior to assignment aboard ship. If the casualties are received from off the ship, then the Commanding Officer may order relocation of the main BDS if appropriate. (Personnel man the BDSs initially so that they can get their equipment and supplies.)

With any luck, you will be provided with adequate phone talkers and extra personnel. If not, it is your job to consult the ship's manning document for potential reinforcements. Rest assured the other department heads are not going to lend any of their personnel unless they must.

Dental officers may also be assigned. An independent duty corpsman or Dental Officer may man one of the battle dressing stations on the opposite side of the ship from the Medical Officer. The best trained personnel will then be more available if damage prevents transporting patients from one side to the other.

When casualties arrive, they are taken from the flight deck (or well deck if brought in by boat) to the triage area by the stretcher bearers. Individuals specifically trained in first aid and litter bearing must be assigned the task of moving the patients. If casualties are received on the flight deck, they are first taken to a central point out of harm's way (the mess decks on an LPD). If they are brought in by boat to the well deck, triage them there. The triage officer will send less severely injured and ambulatory patients to the battle dressing stations for treatment. More serious injuries should be transported to the main BDS for treatment by the physician.

Remember not to send corpsmen out on house calls. It is the ship's responsibility to get patients to your area where treatment can be given. Patients seen in the BDS will be treated and sent back to duty or stabilized and held until they can be transferred to the main BDS. Stretcher bearers go out and bring the patient back; your corpsmen do not go out.

The main BDS is the staging area for patients requiring higher levels of care or MEDEVAC. Unless overwhelmed, don't utilize BDSs as holding points for patients for extended periods. Once a flood of patients has arrived and been treated, get the remaining patients over to the main BDS, shut down the other stations, and get the manpower to your area. Centralize the patient flow as quickly as possible to consolidate manpower in one area. By the end of the mass casualty, all patients and staff should be at the main BDS.

The situation is very similar when internal casualties are suffered during general quarters and the ship is damaged. Patients will be routed to the nearest available BDS, as determined by the damage control assistant in Damage Control Central. This control system prevents injured personnel from going to areas that are damaged, flooded, or on fire. Damage Control Central is informed of all inaccessible areas and directs all movement about the ship during general quarters. Once casualties arrive at the local BDS, they are triaged, treated, and, when possible, transferred to the main BDS. Stress to your stretcher bearers, and the crew, that they **MUST** call DC Central to report all casualties and to request routes to the nearest BDS, and, once at the BDS, to request a route back to their station.

This is where that person in DC Central who is dedicated to tracking personnel casualties comes in very handy. **Remember that personnel casualties have third priority behind fire and flooding**, and if there is not someone specifically responsible for tracking them, some of them have a tendency to get lost during the activity of a mass casualty scenario. During drill and actual scenarios you are required to track each casualty exactly.

You can also work with the DCA to come up with pre-established casualty evacuation routes from areas of potential damage. This greatly decreases the turnaround time for getting routes to stretcher bearers and, since these routes can be pre-printed and distributed ahead of time to the stretcher bearers, they improve accuracy.

Casualties may end up in a BDS run by an HM3. Phone communication between BDSs and the main BDS is vital. Advice can be offered and instructions given to help stabilize patients until you get to see them. (Note also the compelling need for corpsman training. More on that elsewhere.)

Once you have been aboard long enough to feel at home, suggest to the Commanding Officer a series of mass casualty drills. Remember that practice makes perfect. Drills must be run at least quarterly per instruction to make sure everyone knows what to do. The entire ship is involved. Have some exercises observed for a grade. These drills take prior planning and should be coordinated with the Medical, Deck, Engineering and Repair (if present) Departments. This is definitely scheduled at PB4T. The CO will not be amused to hear a mass casualty drill announced on the 1MC and know nothing of it.

Below are a few tips to keep in mind when running mass casualty drills.

1. Moulage the casualties. This will make the exercise as lifelike as possible. Train the casualties to act appropriately. (Almost every sailor has a bit of ham. Encourage them to scream, writhe, cry, have a seizure, and display an altered mental status. Keep it safe, but unnerving.)
2. Be certain there are enough people to assist in the BDS. Stretcher bearers trained to take vital signs will help tremendously when patient load increases and you are running out of corpsmen. If a Dental Officer is aboard, have walking wounded triaged to that battle station.
3. As few as possible stretcher patients should be sent to the more inaccessible battle dressing stations. Walking wounded may be best served in these areas.
4. During general quarters drills, arrange occasionally to walk through your BDSs where the corpsmen are assigned, then drill them on locating equipment and materials stored in the lockers. A good drill is to select ten items and give them one minute to find them. If the corpsmen are well versed in their inventory, they will retrieve these items at the snap of a finger. This is something they will be tested on in Refresher Training. If they are unable to do so, they need to run through their inventories repeatedly until they know where everything is stored.
5. The emergency water tanks located in the BDSs may be rigged differently from station to station. The corpsmen assigned to a particular station must be able to open the tank and obtain fresh water. Be sure they are familiar with which valves open and which valves close the tank. A diagram and instructions should be present at each emergency potable water tank.
6. Very often BDSs are located in berthing areas and troop spaces. If you do not have monthly inspections of these areas, you will be missing items. The medical lockers are often broken into and medications pilfered. This can be uncontrollable on some ships. The only way to keep BDSs ready is to have them inspected frequently by the corpsmen assigned to that area. Make the area as secure as possible by locking all cabinets with padlocks and securing materials to bulkheads.
7. Each BDS contains a portable sterilizer; make sure every corpsman knows how to operate it and the oxygen cylinders and any other equipment present.

NOTE: All corpsmen and dental techs WILL be required to demonstrate to the REFTRA observers how to operate the potable water tank and each piece of equipment in the BDS. They will also be required to find all the supplies located in the BDS locker.

Chapter 12, INSPECTIONS

A good portion of your time will be spent performing inspections and being inspected. This is something none of us understands intuitively, so it won't be easy in the beginning. Performing a good inspection is a learned skill; you will become more effective over time.

While in the surface Navy, you will be under the watchful inspecting eye of your Type Commander (e.g., SURFPAC), then the Fleet Medical Officer (CINCPACFLEET), and finally the CINCPAC Medical Officer at the top of the pyramid, the unfortunate base of which is you. Approximately every eighteen months, each ship will get an administrative inspection. It may seem at first that this inspection is intended to embarrass or pick on you. It is not. It is intended to make sure you and your department understand how to properly maintain yourself and the ship from a medical standpoint. Even though this inspection is meant to help, you certainly don't want to mar your image by failing miserably. The Captain will only see that you did not do very well. The next thing you know, someone else is running the show! Don't let this happen. Be ready for every inspection.

One thing to keep in mind is that before any type of inspection, you should request a Technical Assist Visit (TAV). This is not required but is a very good idea, and you really should request one. You are given a very detailed inspection, and the inspectors are there to teach you what you need to know to pass the real inspection. The results of the TAV are strictly for the CO and you or the department inspected; they do not leave the ship. There are numerous inspection teams that may come through periodically. Always do your best to prepare for them. Use common sense to find out who is coming and what they want. There is an administrative check-off list that you should receive from SURFLANT/PAC prior to each inspection. If you don't get one, ask for it, and also check the files for the old inspection sheets to see where the problem areas were before. Follow these inspection sheets to the letter because your inspector will! This is akin to getting the answers to the Biochem final exam and being allowed to take them into class. If you can answer "Yes" to 90% or better of those questions by inspection time, you won't have any problems.

MEDICAL READINESS ASSESSMENT or MRA

Formerly, the Medical Readiness Evaluation or MRE—this is your absolute biggest and most important inspection. If you don't pass, you will probably be looking for a new job. This inspection evaluates everything—your departmental organization, 3M, supply, training, and even quality assurance programs. Medical records will be checked for completeness. The admin system will be examined for proper filing of pertinent instructions, textbooks, documents, and reports. This includes all departmental instructions that must be written (Medical Department Organization, Battle Bill, Mass Casualty Bill, Medical Officer Standing Orders, etc.). All emergency equipment and supplies will be scrutinized. The inspectors will do spot checks of the 3M system and spare parts, determine amounts of AMMAL supplies on board/on order (you must have over 95% of your AMMAL). All logs (daily journal, STD, Sick Call, training, etc.) will be examined, and the laboratory and x-ray capabilities will be inspected. The ability to provide ward care as well as your archives of patient records and other archived files will

be assessed. The inspectors will investigate all training records and logs, with additional attention to stretcher bearer training. The Watch, Quarter, and Station Bills must be updated and accurate, with the latest GQ manning lists for the BDSs posted beside it. Make sure the PQS board is updated and accurate and also has posted beside it a list of authorized signatories for various PQS items.

The Medical Department spaces will be inspected for sanitation, safety, and habitability. It is a complete check; all areas of responsibility are touched. Almost all the information needed to get these areas “squared away” is included within this very book.

Included within the MRA, but inspected separately, are the Environmental Health and the Industrial Hygiene Surveys. These surveys examine all the Preventive Medicine and Occupational Health and Safety areas of the ship. The potable water system, CHT system, galley, barber, laundry, and berthing areas are inspected. Immunization programs and physical requirements for all preventive medicine and occupational health programs are examined. Also noise, heat, and chemical surveys will be assessed and samples taken if necessary.

A note on medical inspections. Even though there are set time cycles on which you must be inspected, it is still up to you to request the TAVs as well as the inspections. To do this, first call the inspecting teams and find out time frames when both you and they will be available. Once you have determined an unofficial time for inspection, you must send a message to them, officially requesting an inspection on the mutually agreed dates. The inspecting team will also reply by message with their confirmed acceptance. Before you send out any message requesting inspection dates, make sure you chop this message through the XO and CO to ensure that you are really available for an inspection at the arranged time! You may not have been told yet of an unexpected ship schedule change (remember that schedules are written in pencil). It is very poor form to request a change of inspection dates as soon as you receive confirmation.

INSPECTION AND SURVEY BOARD (INSURV)

INSURV inspections are major ship-wide inspections done every three years that you may have to suffer through. The INSURV board will inspect the ship from top to bottom. The Medical Department will be surveyed just as hard as other areas. Luckily, if you do everything for an MRA, you will pass INSURV. Other detailed areas, such as assignments of litter bearers in mass casualty drills, may be covered, but everything else is the same.

THE OPERATIONAL PROPULSION PLANT EXAMINATION (OPPE)

OPPE is really more an examination for Engineering. But if you haven't figured out by now, Medical is involved in **EVERY** shipboard inspection. This particular inspection covers all aspects of Engineering, from Supply to Engineering casualty drills while underway. Medical's involvement is minimal but still important. PEB, the Propulsion Exam Board, will only look at your heat stress and hearing conservation programs. Don't be surprised if your instructions are different from what PEB says. Instructions (particularly heat stress and hearing conservation) are open-ended and interpreted differently by each department. You might want to get together with the other

departments (usually Engineering) and write an instruction outlining responsibilities. This helps eradicate the us-versus-them attitude. Then, if an inspector says something is wrong, at least the issue has been addressed, and the inspectors see that the ship is working hard to comply with Navy Instructions. (See Heat Stress/Hearing Conservation to see how to manage your programs for the inspectors.)

RCPE/ORSE – RADIOLOGICAL CONTROLS PRACTICE EXAMINATION/OPERATIONAL REACTOR SAFEGUARDS EXAMINATION

For nuclear-capable ships, these inspections instill fear into the hearts of nuclear officers and thus into every officer on board (nukes like others to suffer with them). RCPE is on tenders and ORSE is on ships with nuclear reactors. Medical's role is essentially the same for both. If you have a Radiation Health Officer, this is their big inspection, and you need to be there to provide moral support; the nuke inspectors do their best to destroy it. Your radiation health program, health records, and reports (more on the specifics later) must be perfect. Even if it is perfect, according to the last inspector, this group WILL find mistakes. It's their job, and they do it well. They get help because the nukes keep re-interpreting NAVMED P-5055 and finding new things to ping you on. You and your corpsmen will also have a chance to shine during the drills when you get to treat a contaminated injured person. Remember these are line officers and aren't looking to test you medically; rather, they focus on how you handle a contaminated injured person and if you know proper decontamination procedures. Again, you must know NAVMEDCOMINST 6470.10 cold! Guaranteed, they do.

NUCLEAR WEAPONS ACCEPTANCE INSPECTION (Nwai)

These inspectors are looking at the radiation health programs for weapons personnel. They are also looking at the Personnel Reliability Program (PRP) described in detail in OPNAVINST 5510.162 (CH-1). The basis of the PRP program is that only personnel of the highest caliber will be certified to have access to nuclear weapons or communications regarding them. Medical's role is two-fold. One, you do an initial screen of the medical record for personnel being considered for the PRP program. What you are looking for are signs of emotional instability or a medical condition that would impair someone's judgment (e.g., alcohol abuse). If, on the initial screen, you do not find any medically disqualifying conditions, you state that in the record and inform the person requesting the screen. After everyone involved with that individual's case has provided input (other types of records are reviewed), then a decision is made whether or not to include that person in the PRP program.

When the CO approves the final request, then you note it in the medical record and sign the entry line in the personnel record, signifying that the person is fully screened to be enrolled into the PRP program. Next, you place the pink PRP sheet in the record and label the record as PRP program. Make sure that the date for the initial medical screen is before the final placement into the PRP program and that the final medical placement into PRP is after the command approval but within 5 days. The inspectors do check dates. This will require some coordinating with whoever is in charge of the PRP program to make sure you get notified of final approval. A PRP screen will be done at each new command. These records are kept separately (a separate drawer is fine), and you must be able to account for the location of all PRP records at all times.

The second part of Medical's role is when someone is treated and will be impaired for a period of time. They need to be removed from the PRP program for the duration of that impairment (e.g., someone has surgery and requires painkillers post-operatively for several days. The individual is temporarily removed from the PRP program for the time they are on narcotics.). If someone will not be recovering from the condition within 6 months, then he/she is permanently removed from the PRP program (e.g., if they are diagnosed with a personality disorder). Note this in the medical and service records and remove the pink PRP card. Always keep a copy of any temporary de-certification from the PRP program, and make sure that there is an entry to place the member back in the PRP program.

INSPECTIONS YOU PERFORM

As ship's Medical Officer, you are sanitation officer, safety officer, personal appearance patrol officer, and maintenance expert all rolled into one. (Remember that course in medical school on inspecting head facilities? Of course not!) You will be the inspector for a variety of areas and facilities. Outlined below is a general format for inspecting personnel and spaces. Many of these areas will be covered in detail later in this book by appropriate category.

GENERAL CLEANLINESS

Every department is responsible for its assigned spaces. The new Medical Officer often neglects this duty. Decks, bulkheads, lights, medical equipment, etc., all need periodic maintenance and cleaning. You will be amazed how fast your spaces can accumulate grease, dirt, and dust. Ships are not clean by nature. They must be made clean. The material condition of your equipment and spaces will deteriorate before your eyes if you don't maintain everything on a regular basis.

Cleanliness must be uppermost in your mind whenever you check your spaces. I can guarantee it is uppermost in the XO and CO's minds, and, therefore, will soon be uppermost in your mind. (White and bright and shiny and gray is the motto of most COs.) Is there dust and dirt in the angle irons, on the decks, bulkheads, and equipment, or trash strewn about and gear adrift? Are medicines and supplies properly stored, or is personal gear in the spaces?

Each person in charge of a particular area is responsible for keeping it clean and secure. Secure means that everything is clean, stored correctly, and rigged securely for sea. For example: If the lab tech doesn't properly secure the microscopes and the ship takes a twenty degree roll, \$15,000 worth of equipment can be lost in a heartbeat! You can't afford that. You, the division officer, the chief, or LPO should ensure that spaces are locked and secured daily. Inspect them occasionally and point out discrepancies.

Field days (hours devoted to cleaning) should be held once a week. Every space, passageway, etc. should be cleaned thoroughly on these days. The overheads need special attention, because they are hard to clean and often ignored. Periodically, the deck will need stripping and waxing, and the bulkheads will need to be washed down.

The ward head (if you have one) should be the cleanest on the ship. As a matter of fact, medical spaces should be the example of cleanliness for the ship overall!

Another important aspect of maintenance is painting. Bulkheads, desks, and cabinets all need painting periodically. Don't let everything go so that suddenly every painted area looks terrible. Get a program going of painting each month or each quarter. This helps keep the spaces looking sharp and can prevent a lot of work later. A well painted, clean space is a better environment to work in than a poorly maintained space. The crew's working environment is just as important as their living area.

ZONE INSPECTIONS

The Medical Officer is not technically required to engage in non-medically oriented duties. (Don't try to take that rule to the bank!) However, you may be required to conduct periodic zone inspections as part of the officer inspection force. If you don't, your division officer will. Some ships perform several partial inspections, and others do the ship from top to bottom in one day. No matter how it is done, the inspection can be difficult if you don't know what you are looking for.

Zone inspections are designed to evaluate the material condition of a space by looking for safety, electrical, and fire hazards and inspecting damage control equipment and fittings. Discrepancies are reported so they can be corrected. A Zone Inspection Discrepancy List (ZIDL) is submitted to the department responsible for the space. People will be hitting your spaces; it is only fair that you do the same to them!

If you systematically approach an inspection, you won't miss anything. Perform them as you would a physical examination. Begin in the overhead and work your way down. Check for these items.

1. Dirty vent covers.
2. Broken or frayed wires.
3. Burned out lights and/or nightlights.
4. Leaky valves or pipes.
5. Torn lagging (insulation).
6. Burned out battle lanterns (emergency lights).
7. Current fire extinguisher inspection tags.
8. Current electrical safety tags on every piece of electrical equipment. Coffee pots and floor buffers are a big hit, since they must be electrically safety checked monthly.
9. Malfunctioning equipment.
10. Dirty bulkheads and decks.
11. Material condition of the deck. Does the deck need to be repaired or replaced?
12. Areas that need paint.
13. Safety items: goggles, shields, eyewash stations present and functional.
14. Is the compartment check-off list (CCOL) present, in its correct location and up to date?
15. Proper labeling of the space and compartments.
16. Proper gear in space.
17. General cleanliness.
18. Damage Control fittings. Are x-ray, yoke, and zebra fittings properly labeled and either set or able to be set?

19. Is personal gear in the space and not properly stowed?
20. Are particularly heavy items secured for sea with brackets and screws?

This partial list will get you through 90% of a zone inspection. The rest is common sense. Ask yourself: Can this space effectively and safely fulfill its function? If not, why not? Then write down the answer.

PERSONNEL INSPECTIONS

It is a good idea to do Medical Department personnel inspections at least once a week. Use this opportunity to check for general appearance, cleanliness, proper uniforms, haircuts, and shaves. While this may not sound important, personal appearance aboard ship is taken as a symbol of the operational effectiveness of a department. Medical officers have a reputation in the Navy for being less military than line officers, and your personnel will probably push to see how lax you will allow them to be. It's important to set a good example by being sharp in your own appearance and to show the personnel that you care about their reputation. This doesn't require razor sharp creases, Marine Corps style haircuts, or shoes that look like mirrors, just clean pressed uniforms, hair not touching the ears or collar (for females it cannot fall below the bottom of the collar), and shoes that have some shine on them. In other words, your personnel should meet the ship's crew's average appearance.

Personnel inspections are held in ranks. If you are the inspecting officer, approach the officer in charge and await his/her muster report. After the report is given, proceed to inspect the front rank from left to right. At the end of the first rank, turn and walk behind them inspecting from the rear. The first rank may need to take a step forward to allow room for you to walk. At the end of that rank, turn and face the next rank and start over. Personnel inspections should be in "open" ranks. If inspecting the troops uncovered for hair length, the order is: "First rank, uncover; two!" On "two," everyone uncovers. When that rank is finished, the order "First rank, cover; two!" is given, and all replace their covers.

As you inspect, have a recorder follow to take notes of discrepancies. This helps to let an individual know where help is needed and rewards a good appearance. Inspections should be a teaching tool, not a disciplinary one.

If you are the officer in charge who escorts the inspecting officer, make a muster report that sounds something like, "Good morning, (Sir or Ma'am). Medical Department all present or accounted for and awaiting your inspection." Then fall in to the right of the inspecting officer and lead through the ranks. At the end of the inspection, the inspector will offer comments and suggestions with an overall evaluation of the troops. You salute; the inspecting officer then departs.

This scenario will vary a bit, but generally it is similar everywhere. You will be briefed on how your ship handles it when the time comes.

A good personnel inspection should begin with the head and work down to the feet:

1. The cap should be clean and worn properly, i.e., squarely on the head, not sliding off the back or cocked to one side of the head.
2. Hair should be regulation length all the way around.

3. The face and neck must be clean-shaven. If a beard is authorized (you write the medical waiver chits), it must be neat and trimmed. The CO is final approval on no-shave chits. The only medical “cure” for severe pseudofolliculitis barbae (PFB) is to grow a beard.
4. Look for general hygiene (clean ears, face, neck, and hands; nails should be trimmed). Advise those with acne problems to seek medical treatment.
5. The shirt should be neatly pressed without lint or dangling pieces of thread (otherwise known as Irish pennants).
6. Nametags should be worn properly. The rating badge is worn on the left arm. Unit identification tabs are worn on the upper right sleeve. If ribbons are worn, they must be in the proper order and at the proper height over the left breast pocket (one quarter of an inch). Warfare insignia are worn one-quarter of an inch above the ribbons.
7. All buttons should be present and buttoned.
8. Belts should be clean, with the buckle well-shined and free of dirt.
9. Pants should be neatly creased, clean, and of the proper length.
10. If you inspect enlisted personnel in dungarees (the work uniform aboard ship), you can be less stringent about their appearance. But the dungarees should be clean, free of holes, and in good condition.
11. Shoes, including the edges around the sole, should be clean and polished, with laces in good condition (not broken or tied in pieces).
12. Poor appearance due to an overabundance of adipose tissue should be corrected with a weight control program. (See Weight Control section.)
13. Check for colored or patterned underwear visible through summer whites or visible at the neck and warn the offenders.

Seabag inspections should also be done on your enlisted personnel. The US Navy Uniforms Regulations (NAVPERS 15665) contains a list of required uniform items each individual must maintain on board. This (in theory) ensures they have every uniform and are ready for inspection. It is particularly important to check their seabags 2 to 3 months prior to a deployment so that they really DO have all uniforms on board and are not caught short when the uniform changes (always mid-deployment).

Medical officers often have an intrinsic distaste for inspections and enjoy being the inspector even less. But inspections serve a real purpose. Many young sailors are away from home for the first time. Without a mother around to nag them a little, how are they to know how to dress and behave? The discipline needed to meet your approval is a positive, not demeaning, stroke for them. Failure to inspect them properly can diminish self-esteem and cause morale problems. Learn to do it right; it's worthwhile.

HEALTH AND SANITATION INSPECTIONS

Health and sanitation inspections are the responsibility of the Medical Department. There is a tried and true, simple, and efficient means for measuring the quality of these inspections. If they make you unpopular and cause heartburn among the people inspected, you are probably doing it right. If they smile when they see you coming, you are not being critical enough.

You will need to develop considerable knowledge as you go along. To become a good inspector requires hard work and judgment. As medical inspector, you will be the

Commanding Officer's advisor in an area where the CO may have little knowledge. If the medical inspector does not correct the minor deficiencies, they will become major deficiencies, and someone will get sick or hurt. Three guesses as to where the blame will fall—pick one: A) the CO will take the blame; B) the horoscope for that day will be consulted and the CO will blame the Fates, and C) you.

To avoid making inspections an exercise in futility, understand that not everything you want changed or repaired will be taken care of immediately. There may be jobs elsewhere with equal or higher priority that consume the crew's attention. If you ever want to have recommended changes implemented, document and re-document discrepancies. Make a case on paper for appropriate corrections. It may seem, on occasion, that inspections are no more than a futile paper chase, but if you hang in there with quiet determination, you can cause substantial improvements in the ship's readiness. A long paper trail is also the best evidence that you tried.

Important areas for inspection and required frequencies include:

1. Food service: informal—daily, formal—every two weeks.
2. Barber shop: monthly.
3. Berthing areas: daily (usually with XO on heads and beds), formal report—weekly.
4. Heads: weekly for those not attached to berthing areas.
5. Laundry: monthly.
6. Coffee messes: periodically.
7. Ship's store: monthly.
8. CHT pump rooms: weekly.
9. Water sanitation: daily for chlorine/bromine residuals, weekly for bacteriological surveys.
10. Waste collection and disposal: as needed.
11. Insect and pest control: should set up system to inspect and spray if needed in each galley every two weeks.
12. Mess cooks: daily.
13. Refrigerators and dry stores: monthly.

The results of the above inspections are kept in the appropriate logs, e.g., water sample logs or PMT logs. Completion of inspections is also noted in the Medical Department daily journal. The discrepancies can be kept in the various logs. In addition to the above paper work, every two weeks a report is due to the CO via the XO of all the above sanitation inspections and their results. A word of warning—if the inspection results will make another department look bad (e.g., Deck's berthing is a pigsty), make sure that the affected department gets a copy of your inspection results before the CO does. If not, that department head will get a copy of them immediately after the CO does, making them look bad to the CO. Help your shipmates; let them know first. It is also good policy to send copies of the inspections to the appropriate department anyway for their files.

The Medical Department is the “watchdog” of shipboard sanitation practices. Although not involved in the day-to-day running of sanitation programs, we are responsible to ensure that all safe sanitary principles are followed. Medical Officers attain the lofty position of sanitation and preventive medicine specialist without having any training in basic shipboard sanitation practices. Although it may seem that common sense should prevail, you will be surprised at the detail of the specific rules and regulations. Common sense will take you part of the way, but not far enough to be good. Read the instructions

(P-5010 is the Preventive Medicine bible), and then go into the inspection with the attitude that your mother or great-aunt (Mrs. Clean) is coming to visit and always has the white glove out.

Soon after reporting aboard, tour all areas that you are responsible for inspecting. Then return to this book and the references listed to learn about the requirements for good sanitation. Too many Medical Officers leave this entire business to the chief or LPO. While they may be well versed, you will be leaving yourself wide open for criticism. Your head will be on the block if an area for which you are responsible fails inspection.

You must learn to inspect effectively and critique so that corrective action can be taken. If you are fortunate enough to have a Preventive Medicine Technician (PMT) aboard, you have a tremendous asset in this area. You can learn all you need to know from that valuable resource. If you don't have a PMT, the chief or LPO may have enough experience to help, but your hands are going to be full. Teach your enlisted personnel what they are doing wrong and what they need to do to correct deficiencies.

Several sanitation topics will be discussed separately with a word on special problems. If you learn no more than what is in this little book, you will have about 90% of the information needed to become a sanitation expert. NAVMED P-5010 goes into more detail about each type of sanitation inspection. Read it before you inspect each area.

GALLEY INSPECTIONS

This is the A-1 area of concern. Bad sanitation can cause food-borne illness, diminish morale, and stop the ship as quickly as any torpedo. Food Service is run by the Supply Department and has an officer responsible to the SUPPO. Every ship is assigned a number of MS personnel (MS is Mess Specialist, or cooks) who plan, prepare, and serve the meals, as well as keep the galley and dining areas clean and sanitary. In addition, each ship provides "mess cooks" in numbers adequate to perform the heavy work of cleaning, breaking out food, storing food, and generally doing the manual labor. These "mess cranks," as they are called by their shipmates, are E-1s through E-3s, usually new to a command, and obligated for three months of mess duty. The E-4s are not assigned, since they already should have been FSAs when they were more junior.

The mess deck master-at-arms (MDMAA) is responsible for the dining area and scullery and runs the main mess deck. The MDMAA trains and manages personnel assigned to maintain the enlisted dining facility. Ordinarily the MDMAA is a first class petty officer and serves a three-month tour.

What does the Medical Officer do? For starters, a biweekly, written food service sanitation inspection report must be submitted to the Commanding Officer. Record this on a NAVMED 6240/1 form. It does not have to be done personally by the Medical Officer. The PMT, chief, or LPO will do it on a regular basis, but the Medical Officer should occasionally attend to see that all areas are thoroughly inspected and discrepancies recorded. Be picky! This is the only way to ongoing good sanitation. If the area constitutes a health hazard, recommend to the Captain that it be **CLOSED UNTIL DISCREPANCIES ARE CORRECTED**. Usually the threat of closure brings about miraculous results. Remember the crew usually has no other place to eat,

especially at sea, so allow Supply a few hours to correct the problems, then re-inspect. Make it a tough inspection!

Another good tip is to make walk-through inspections of the galley and food preparation areas about once a week (the bakery is a good place to start) to ensure: 1) general cleanliness; 2) proper food preparation methods; 3) proper equipment types, use, and upkeep; and 4) good food handling practices. The best time to do this is after the evening meal when the spaces should be their cleanest. In port, do it during the workday. But the most important thing is to make your presence known. Eat with the crew periodically. You can find out a great deal and show them your concern in a very tangible way. Also, an officer must sample every meal in the EDF (enlisted dining facility); if you volunteer to sample a few meals, the OOD will be extremely grateful.

What should you look for during an inspection? (See P-5010, Chapter 1.)

1. All surfaces: the deck, counter tops, salad bar, etc., should be clean and free of grease and obvious food debris. Overheads should be dust free (climb up and look) and the bulkheads clean. The exhaust hoods, grills, steam kettles, and ovens should be clean and without food debris. The same for refrigerators, inside and out (look into the cracks with a penlight). The can openers and meat slicers are common areas for food debris to collect; checking here will show that you know what you are doing.
2. Be sure leftovers are properly handled. Discard any food items not properly COVERED, DATED, AND REFRIGERATED. Poor handling of leftovers is a common deficiency with potentially disastrous results. Anything over 36 hours old must be discarded.
3. Watch that food service personnel are wearing gloves, hats, and clean uniforms when handling food, and that no smoking, eating, or drinking occurs in the food preparation areas. Make sure that no personal gear or cleaning gear is stored in food service areas.
4. Make sure the meat slicer is kept clean and that no sampling takes place while meat is being sliced. You will be amazed at the number of mess cooks who eat while preparing meals, risking transfer of bacteria from their mouths to the food.
5. All garbage should be promptly removed from the food service and scullery spaces, and trashcans should be kept clean and sweet smelling.
6. Check refrigerator temperatures to be sure food is kept at the correct temperature and covered. Every reefer should have a temperature log posted on the door, and the MSs should record the temperatures daily. Obtain one of the thermometers the PMTs use for their inspections. Freezers should be 0°F or lower, dairy products box 32-34°F, milk dispenser 38-44°F, chill box 32-35°F, and thaw box 36-38°F. If you want to make a point, ask to see behind the refrigerator or small reefer.
7. Make sure that frozen food is being thawed in the thaw box, not on the counter top.
8. Check reefers to ensure no moldy or rotten food is being stored there.
9. Ensure that thermometers are posted in the scullery and that temperatures are taken and recorded each shift (three times a day). This requires continuous education of the Mess Deck MAA, but these temperature logs will be checked on the Engineering Department inspections. Also, make sure that they are contacting Medical for any temperature 100°F or greater.

10. Check the temperature gauges on the dishwashers in the scullery to ensure that dishes are being washed and rinsed at the proper temperatures. Wash water must be between 150-160°F, rinse water between 160-180°F and final rinse between 180-195°F. There are also heat sensitive tapes available to document the temperatures. If it fails to meet the proper temperatures, the dishwasher is not supposed to be used, and a work order should be submitted to correct the problem. In addition, make sure that the water jets in the rinse section are not clogged. Leftover detergent can cause chemical diarrhea, and you have enough work to do. Again, prevention is key.
11. Potentially hazardous foods kept between 40-140°F are to be used within three hours or discarded. These include potato, egg, and chicken salads. If there is too much waste, have the MSs prepare the food in smaller batches, so there will be fewer leftovers.
12. Check that there are no visible insects, especially cockroaches. If you can see them in the daylight, the problem is bad. (More on pests later.)
13. **WASHDOWN HOSES ARE NOT AUTHORIZED ANYWHERE ABOARD A SHIP.** Hoses hooked to fresh water lines to wash down decks and equipment are sources of contamination of the water supply and are forbidden.
14. Make sure that personal gear and, more importantly, cleaning supplies are not kept in the galleys. The one-gallon cans of cooking oil and liquid detergent look the same, and with the small labels on them, it's hard to tell them apart. Make the MSs keep them apart!

When inspecting, use a checklist until you are well versed. Be systematic, and you won't miss much. Start with the overheads and work down. Along with mess decks and galley, the bakery, CPO mess, wardroom mess, and the pantry also need periodic inspections. The same rules apply everywhere.

How often should these inspections be performed? At first, three times a week, until you are proficient and the areas satisfy you. Thereafter, once a week should be sufficient with the written biweekly reports. The chief or LPO should help with these. Eventually you won't be constantly inspecting.

Note: You do not have to announce an inspection. Surprise inspections are more productive than announced ones. Take corpsmen along on all inspections and instruct them on proper sanitation practices. All corpsmen should learn to inspect food service areas. This will not only help them in their careers but also help you by relieving you of some of the responsibility.

Be cognizant of food delivery to the ship. All food products are required to have a medical representative inspect them before they are accepted. Milk must be at 45 degrees Fahrenheit or lower and fresh. Other food from independent vendors must have a stamped invoice to prove it has been inspected before delivery.

Inspectors are usually located at each large naval facility to inspect vendors as they bring food items to the base. However, vendors do not always make this stop. They bypass the inspector in an effort to make deliveries quickly or, sometimes, to pawn off bad items. To help prevent this, mess specialist personnel will accept all food deliveries to the ship. They are required to inspect for freshness and quality. A Medical Department representative is also there to assist them. The Quarterdeck watch should **NEVER** be allowed to accept food items.

Make sure everyone goes by the book on this one! When inspecting food items a good rule of thumb is to ask yourself, would you buy this food for yourself and serve it to your family? If the answer is no, then you should refuse shipment and not serve it to the crew. Fruits and vegetables should look fresh and be free of mold and rot. Frozen food should be frozen and remain frozen until stored in the freezers. Supply is usually good about making sure there is extra help to get frozen food to the freezers quickly. Dry stores should be intact, free of insect infestation, and show no watermarks. Look for intact packaging. A more detailed inspection is in order if bugs are found. Allow as little cardboard aboard as possible, since it is the favorite home of cockroaches.

The Medical Department is required to perform a daily inspection of all mess personnel. A qualified corpsman can be assigned this job, but you should do it personally until satisfied and then do it occasionally to keep everyone honest. Clean hands, trim nails, cleanly shaven faces, and clean uniforms are a must. You are also checking to see that personnel handling food do not have colds, runny noses, or cuts on their hands or arms; these sailors can't handle food, but they can still clean. It will be your job to see that the Supply Department provides adequate manpower to meet hygiene standards.

Areas often neglected in food service are refrigerator decks and dry storerooms. A Medical Department representative, and occasionally the Medical Officer, should make monthly inspections in these areas. Reefer decks need to be checked for over-icing, cleanliness, reefer seals, proper temperatures, and overstocking. Dry storerooms should be checked for pests, outdated stock, bad cans, cleanliness, leaky pipes, and spoiled food debris. Look especially under the grating that holds the food pallets. Food gets spilled in between these grates and may be there for months or years. Roaches and pests can have a field day. Your PMT will be able to tell you more about your bug problem.

When you are in a food storage area, especially dry storerooms, make sure you look in the overheads; many times CHT (sewage, or black water) pipes run through these spaces. Drip pans should be located beneath every valve and takeout plug along the lines. Any leakage you see should be noted immediately and the Engineering Department notified. Food exposed to dripping waste is to be surveyed and discarded if ANY question of contamination exists. Cans and goods that are tightly boxed usually will escape contamination. All other food items should be destroyed.

Get into all food service and storage areas frequently. Use your senior enlisted personnel as much as possible, but don't punt. One food-borne illness outbreak is one too many! For information not outlined here, consult NAVMEDPUB P-5010 or your local NEPMU.

DISEASE OUTBREAK INVESTIGATION

As mentioned above, the whole point of enforcing proper galley sanitation and food preparation is to avoid a food-borne illness outbreak. Since the majority of the crew eats the same food in the same place, anything wrong with either can lead to a lot of sick people. Even having 10% of the crew become ill can wipe out your medical resources and staff. Again, PREVENTION IS THE KEY.

If, in spite of your best efforts, the worst happens, and you have an outbreak of disease, acquired either on board or ashore, you need to act quickly. P-5010 Change 1 has incubation times of common food-borne pathogens and step-by-step instructions for investigating a food-borne illness outbreak. Don't be afraid or embarrassed to ask for help; this can be an overwhelming problem. Further assistance is a phone call or a message away at your local NEPMU or hospital. (See Appendix E for NEPMU phone numbers and message PLADs.)

BERTHING SPACES

The crews berthing areas are vitally important and should be looked into daily. Most ships have daily messing and berthing inspections done by the XO as well as the officers and chiefs to ensure proper cleaning. As the Medical Officer, a daily inspection by you would be an impossible task. Generally, a corpsman may accompany the XO on the daily "heads and beds."

Inspections of living compartments must be performed routinely. Living areas can become pigsties overnight. Transmission of disease and the spread of cockroaches are greatly increased by unsanitary conditions. Engineering and deck hands especially need to be checked because of their dirty work environments and long hours.

The assigned cleaner for each compartment should begin working right after quarters and be finished by approximately 1000 each morning (a good time for an inspection crew). Discrepancies (dirty decks, unshined lockers, dirty linen, etc.) should be corrected that same day. The compartment cleaner has plenty of time to get these things done if it is their only job. Cleaners are assigned for a specified time and spend that entire period caring for the living spaces and attached heads. Expect any of your corpsmen who are E-3 and below to be assigned as compartment cleaners. After all, they live in the berthing areas too, and it's only fair that they should spend some mornings cleaning. Don't fight this one, since your E-3s and below cannot be assigned as mess cooks by regulations, and this mitigates the situation and keeps the complaining of others to a minimum.

When you report aboard, have an officer or chief take you on a sanitation inspection of the berthing areas and heads. Basically, what you want is CLEAN! (See P-5010, Chapter 2, for more details.) Problem areas include:

1. Overheads.
2. Angle irons along the bulkheads. Just about anything can be found including cigarette butts, rubbers, tools, paper, and other trash.
3. Gear under the mattress – a fire hazard. No gear of any type should be placed under a mattress. Most of the racks are the coffin type, where the mattress sits on top of a storage bin.
4. Check the scuttlebutts (drinking fountains) to be sure they are sparkling clean. Sailors like to use them for cigarette and snuff disposal, creating a haven for scum buildup and bacteria, besides simply looking disgusting.
5. Check the linen. Sailors tend to think that their sheets will miraculously clean themselves. Make them strip their sheets weekly and turn the bedding into the laundry, or many won't do it. A little motherly nagging will go a long way.
6. Another favorite is to leave dirty laundry adrift in the compartment. Everything from dungarees draped over the bed to underwear hanging from the overhead.

Gear adrift is *verboden*! It is a safety hazard. The compartment cleaners should be confiscating this before you get there. If they aren't, you do it, and after one or two times of the offenders having their personal items taken, they will learn. Another favorite in female compartments is to leave curling irons plugged in. Curling irons are forbidden on ships and must be confiscated; they are an electrical hazard.

7. Check for evidence of food being stored. NO open food items of any kind are allowed in berthing compartments. Food attracts roaches. The best clue is to check trash cans for concealed Domino's Pizza boxes!
8. Check all the mattresses to be sure they are not stale, smelly, or in poor condition. All bedding should be aired at least twice a year. There is an air bedding bill so departments know when and where to air bedding.

The compartment-cleaning bill should be posted in each space so everyone knows the rules. Details will be found in sanitary regulations and in this little book. If problem areas are apparent, inspect them more often until corrected. A case of crabs or lice running rampant can play havoc with Sick Call.

HEAD SANITATION (or "How to Make the Toilet Bowl Shine")

Another vitally important area that should be looked into daily. Problem areas to be particularly careful of are:

1. Under the urinals and commode rims. If these areas are not cleaned, a lingering odor will always be present in the head. This results in the use of deodorant blocks to try to hide the smell. You don't want to hide the smell. You want to remove the source of it.
2. Mold and mildew on the shower curtains and mats. Mold will accumulate within 4 hours or less if not cleaned frequently.
3. Splash shields around the urinals – they need to be clean, especially in the corners. Drunken sailors coming home from liberty are not good shots.
4. Commodes and urinals – all should function and not leak. If malfunctioning units are discovered, inform the Compartment Petty Officer. Engineering should repair it within 48 hours.
5. Don't allow the use of scrubbing cleansers. These plug up the plumbing (like pouring sand into the drains).
6. Check for washdown hoses! They are absolutely taboo everywhere. With the number of lines, vacuums, and suction devices on board, you occasionally will get pressure in the lines that can suck up dirty water into fresh water tanks. If you see washdown hoses, remove them.
7. Last, but probably most important, make sure there are enough rolls of toilet paper and paper towels. This is often overlooked, but a shortage will definitely make the crew very unhappy.

BARBER SHOP

Most ships will have a barbershop (in many cases there will be two, one for the officers and one for the enlisted personnel). These are often neglected on sanitation inspections. The ship's barber will probably be a Ship's Serviceman (SH) responsible

for cleaning and properly caring for the instruments, as well as the general upkeep of the space (and for giving you a good haircut).

When inspecting this area, ask the barber questions to check their awareness of proper procedures and directives. This alone can indicate whether or not the area is being kept up to standards.

1. What does a barber do if a person has a scalp lesion or infection? Ans. Refer to Medical for treatment.
2. What about blackheads and ingrown hairs? Does a barber treat them or refer them to the Medical Department? Ans. Refer to Medical
3. What solution should be used in disinfecting barber's equipment? Ans. Barbicide spray.
4. When was the barber's last physical? Ans. Should be within one year.
5. How long does the barber keep disinfectant solutions? Ans. No more than one week, may need to change daily depending upon the workload.

These may sound simple, but you will be amazed at the answers you will get! In looking at the spaces, check:

1. Proper cleanliness and sanitation of the clippers, combs, and instruments.
2. No Smoking and No Eating or Drinking signs are displayed.
3. Individual paper neckbands or strips are available and used for each patron.
4. The deck should be swept at the end of each day and washed down with hot, soapy water.
5. The disinfecting cabinet should contain a 10% disinfectant solution that will provide approximately 4% disinfectant concentration in the air. This will effectively sanitize and disinfect all the instruments within 30-60 minute contact time.
6. A current copy of the barber shop sanitation regulations with your signature should be posted.

Last, but not least, see that there are some up-to-date magazines in the magazine rack. There is nothing worse than reading about Jose Canseco's famous game-winning home run from years ago, "the big one that got away," or how to set an informal table for six for the 61st time during a six-month deployment.

SHIP'S LAUNDRY

Annual physical exams are required on all laundry personnel. Look closely at laundry and hygiene practices for:

1. Proper use of gloves and masks for sorting dirty laundry.
2. Separate areas for dirty and clean laundry. They shouldn't be adjacent.
3. Proper hand washing procedures. Hands should be washed before entering and before leaving the space.
4. No Eating or Drinking and No Smoking signs posted.
5. Areas where bleach and detergent are stored must be labeled as eye hazard areas and have appropriate chemical warning labels posted. There must also be an eye wash station within 10 seconds of the work area, and eye protection goggles must be worn when working with chemicals.
6. All washing machines have both salt and fresh water connections. The saltwater connections should be closed and padlocked when within 25 miles of shore or in

otherwise contaminated waters. Fresh water inlets should be rigged (one-way valves) so cross-contamination cannot occur if suction is placed on the line.

The laundry should be generally kept in a neat and sanitary manner. All lint filters in dryers should be cleaned, presses should be in good working order, and dirt and dust should be kept to a minimum. Dust and lint are fire hazards. A monthly visit is all that should be required unless there are problems. After inspection, if you can identify why all whites return as light grays, you'll be in line for the Legion of Merit!

DRY CLEANING PLANT

Larger ships will have a separate dry cleaning facility attached to the laundry. The person who runs this must also have a laundry physical as well as a dry cleaner's physical (for halogenated hydrocarbons), both pre-placement and annual, which includes LFTs. Each must also be certified to wear a respirator and actually wear a respirator and goggles when using the dry cleaning fluids. There must be a plumbed eye wash station within 10 seconds of the work area, as well as appropriate eye hazard signs posted.

COFFEE MESS

The formal, permanent coffee mess areas are in the wardroom, mess deck, CPO mess, and first class lounge. These areas are to be kept just as clean as any other food service area. Of particular note is the use of common cups, spoons, and un-refrigerated dairy creamers. All of these are PROHIBITED per P-5010, Change 1. The coffee mess has been notorious as a source of hepatitis. Paper or personal cups, disposable wooden stirrers, and non-dairy creamers are authorized. The area should be cleaned of all spills, especially sugar. Coffee creamer and sugar should be in clean, closeable containers to deter roaches.

Coffee messes are authorized in many workspaces. The Medical Department representative must do the initial certification to ensure that the coffee mess is in compliance with the regulations. Occasionally inspect these messes as well. This will not make you very popular with the crew, but you will be less popular with the Captain if hepatitis is spread via a dirty coffee mess!

SHIP'S STORE AND FOUNTAIN

Beyond general principles, there isn't much to discuss except for the ice cream machine. SURFLANT/PAC inspectors love to make a big point of it. The machine is to be completely broken down and all parts disassembled after each use. That procedure is a real nuisance and the crew will skate over it whenever possible. Directions for cleaning the machine should be posted on its side. Cardboard in the ship's store area should be kept to a minimum (roaches LOVE to eat cardboard), and all consumable goods should be stored off the deck on clean racks. Consumable goods sold should be individually wrapped or packaged. Decks, bulkheads, and overheads should be kept as clean as the mess decks. A once-a-month inspection should suffice.

RATS

Rats can gain access to ships when pierside. They climb into cargo nets or crawl up gangplanks, connecting lines, and pipes to get aboard. You may not actually see them, but there will be evidence when they are aboard. Clues will be droppings, gnawed food containers, nests, and foul rodent odors. Periodic inspections of storerooms and crawl spaces are important because they breed quickly.

The two most common species of rats are the Norway rat (brown, stout body, blunt nose, tail shorter than the body, and a ski cap with goggles) and the roof rat (slender, dark gray body, pointed nose, tail that is longer than the body, and a chimney sweep attached to the belt). Both are disease vectors and must be eliminated.

The best offense is a good defense when dealing with these pests. Unlike roaches, you can keep rats completely off your ship. Food and quarantine regulations require that upon berthing at a pier and during the time a vessel is in a suspected plague-infested or endemic area, all connecting lines shall be properly fitted with rat guards (consider ALL ports as having rats). Rat guards are those big funny aluminum cones over the lines. To be effective, they must be placed correctly with the pointy side towards the ship and at least six feet from the pier on the line or cable. Gangways and other means of access to the vessels are to be separated from the shore by at least six feet, unless guarded, to prevent rodent movement. At night, areas around the pier and the ship itself should be well lighted. Any cargo nets or devices connecting the ship and the shore should be removed.

The Deck Department is responsible for the ordering, placing, and maintenance of rat guards, but, again, you need to make sure that the rat guards are in place. This is a very easy thing to check as you are arriving or departing from the ship. Also, rat guards are to remain in place until one hour before the ship leaves port. A favorite trick of the Deck Department is to remove them the night before to save time. Try not to let them do this. Deck, however, is usually very good about putting rat guards on as soon as the lines are secure upon arrival in port.

Cleanliness, especially with respect to garbage and refuse removal from landing ramps and gangways, and pierside inspection of incoming subsistence items will help prevent rat infestation. Separation of at least six feet from piers will also help tremendously.

If rats are discovered, elimination with traps is recommended over rodenticides. A sick rat will die in some inaccessible place and will create a stench that can be unbearable as well as unsanitary. Where possible, contact the nearest NEPMU and request assistance in ridding your ship of rodents.

The following three steps apply for roaches as well as for rodents:

1. Prevention of entry.
2. Elimination of food and shelter areas by proper handling of food stores and prompt disposal of refuse and garbage.
3. Elimination of established infestations by using traps and poisons.

After leaving a plague-infested port, a very rare occurrence these days, rat guards should be used while en route to the United States. Rat guards are not required but are

recommended until cargo has been issued a quarantine clearance. Rat guards, of course, may be required by the command whenever the situation warrants. The ship's de-rat ("de-ratted") certificate of exemption is kept on file. This de-rat certificate should be kept up to date whether or not your ship has left port since the last inspection. You are required to be re-certified every six months but can get an extension by message for one month. **Don't let this expire**, since you will be very unpopular (if you remain alive) if the ship cannot dock due to an expired de-rat certification. Your nearest NEPMU or DVECC can help you accomplish your re-cert. Detailed information can be found in BUMED instruction 6250.7 series 6250.12 series. Additional information can be found in the MANMED articles 22-37 and P-5010, Ch-8.

COCKROACHES

There are few things that can ruin a meal faster than watching a cockroach scurry across the table while you are eating. Visible roach infestations are bad for morale and great disease vectors. The key to controlling roaches is prevention. The galley spaces must be as spotless as possible.

The next approach is to use Combat bait traps, which are very effective and non-toxic. After that comes spraying with pesticides, d-phenothrin (d-phen) for the short term, Baygon for the long term. You should plan to do a roach inspection in each galley at least every two weeks and if harborages are noted (a cluster of cockroaches) using d-phen, then you should probably spray with Baygon. It is very important before you spray that the galley is properly prepared. This includes having field day cleaning done, all food removed, cabinets open and empty, and the area secured for at least 1-2 hours before removing the residue from the counters. Your corpsmen will learn all the proper techniques at pest control school.

Note: The Supply Department is required to buy and store all the pesticides and Combat bait traps that you need. You will need to coordinate with them to make sure that Supply stores of the materials are adequate.

CHT PUMP ROOM AND SEWAGE SPILLS

The Medical Department generally ignores CHT (Collecting and Holding Tank – for sewage) pump rooms. This is, however, an important part of your Environmental Health Survey (EHS), and you will be hit hard here if you are not careful. In general, pump rooms must be clean and neat. No Smoking, Eating or Drinking signs must be displayed. Hand washing is required after working in the area, so hand washing stations with soap and paper towels must be available nearby. A gear locker is necessary outside each pump room space to hold boots, overalls, headgear, and other protective wash-down apparatus. A complete outline of how to clean sewage spills is included in the safety section. A spill can result in a small problem becoming a very large one in very short order.

The Medical Department's role in this program is to maintain a list of all personnel who are eligible to work with the CHT system. This is generally all of R-division (the HTs). Their medical records are flagged, and all their shots must be up to date. Anytime there is a spill and someone comes in contact with sewage, they will need a shot of

immunoglobulin and have their shots updated. Also when there is a spill, Medical must certify that the area has been properly sanitized. How to inspect for this is outlined very well in NAVMED P-5010, Chapter 7.

Medical also does a weekly paper towel test of the CHT pump rooms, in company with the person in charge of the CHT system, to test for leaks in the pump rooms. A paper towel is used in hard-to-visualize areas and to confirm leaks. Obviously if a leak is found, it is reported immediately for prompt repair.

POTABLE WATER SYSTEM

This is another area where the Medical Department works closely with Engineering. The Engineering Department is responsible for making water on the ship. There is a "Water King" in M-division who is responsible for the evaporators. This is the equipment that takes seawater and uses steam from the boilers to distill the salt water into fresh water. This fresh water is then treated in different ways depending upon the intended use (potable water for the crew, feed water for the boilers or demineralized water for the nukes). Engineering monitors the pH, salinity, and temperature of the fresh water, since those values are important for the Engineering plant. They also monitor the chlorine or bromine residuals in the fresh water and the potable water systems. They will adjust the amount of chlorine or bromine being added to the potable water to bring residuals to at least trace halogen levels in the system. (Engineers try to keep chlorine out of the feed water since it harms the boilers.)

Medical is responsible for ensuring that the potable water system is safe. This is accomplished by randomly monitoring the halogen residuals daily at selected points throughout the ship. Bacteriological counts are done weekly to ensure no contamination. The actual number of samples required is listed in P-5010, but for ships with complements between 500 and 4000, 12 daily samples are required. How to collect these is also outlined in P-5010, Chapter 6. They should be collected from various points throughout the ship and should read at least trace for halogen residuals; 0.2 ppm is the safer level. If levels drop below trace, you must notify Engineering, who will then batch chlorinate the potable water tanks to bring the halogen residual levels up to standards.

Halogen residuals must also be tested on water received from other sources. In port, you test the potable water connection (Medical needs to watch Engineering do this hook-up to ensure standards are followed). When using questionably safe water sources (overseas, or pierside in an emergency situation), plan to batch chlorinate the water to 5.0 ppm and to have residuals of 2.0 ppm after a 30-minute contact time. When taking water from a water barge, batch chlorinate on the barge first if possible, so as not to risk contaminating the ship's potable water system. The last thing you need is a water-borne disease outbreak.

Medical must do a weekly bacteriological test of the same number of random water samples, at least one-quarter of the ice machines (best to do all), the potable water tanks in Engineering, and, once a month, the potable water tanks in the BDSs. This test is looking for coliforms (E. coli), which indicate contamination in the potable water system. Usually you know there is contamination in the system when you start seeing an increase in diarrhea cases, and then, 2 days later, the water bacteria samples come

back positive. The ice machines are a common source of contamination. P-5010 describes in detail how to collect water samples for bacteriological analysis as well as what to do when you have positive ones. All of this data is recorded daily in the potable water log and the Medical Department daily journal.

For batch chlorination, calcium hypochlorite is used. This is a hazardous (explosive) chemical, which requires special storage and handling. The specific requirements are outlined in the Safety section of this book. Suffice to say here that Engineering, not Medical, handles this material.

Chapter 13, REPORTS

Now that you have done all the inspections and training as well as medical care, you must report these facts. There are two types of reports, internal (for the CO via XO) and external (for whoever is designated on the notice).

There will also be messages or letters asking for additional reports, which may be one time or recurring. Be sure to submit these in time with the proper info addrees. With this as well as with any other type of paperwork, promptness and completeness are strongly praised. **DO NOT** miss deadlines for any reason, and **DO NOT** sit on paperwork because you don't want to do it. The Navy runs on paper; yours needs to be done quickly and routed on, or you will get buried in it. Also, for any report or message that you send out, **ALWAYS KEEP A COPY FOR YOUR FILES**. You would be surprised how many things get lost in the great round file in the sky, and it's much easier to burn another copy than to redo the report. Inspectors also like to see these files. Your files are to be maintained IAW SECNAVINST 5210.11D. You **WILL** need and the ship **WILL** have a copy of the Navy Correspondence Manual, detailing proper formats (SECNAVINST 5216.5D).

Note. All of these reports are covered in other sections. This is to give you a handy list for setting up your ticklers. **Use the Ships Automated Medical System (SAMS) or your computer; let it do your scut work whenever you can.**

TICKLER SYSTEM

You must keep a report tickler, listing each type of report, when it is due, and the address to which it is sent. This can be computerized or in a file, but you must be able to produce one for your MRA. It also helps you plan your month and not lose track of what is due when. It seems at times that all you ever do is send reports to someone (as opposed to when it seems like all you ever do is train, or plan, or inspect, or attend meetings, or see patients...).

INTERNAL REPORTS

DAILY

Binnacle list of sick and injured to CO via XO.

Eight o'clock reports of material condition to CO via CDO inport and via XO underway.

Inspection of food handlers noted in Medical Department Journal.

Inspection of messing and berthing (heads and beds) with XO, report in Medical Department Journal and PMT log.

Halogen residual levels of potable water report in Medical Department Journal and PMT log.

Review and sign Medical Journal entry of significant events of the day, inspections and training conducted, and injuries that occurred.

WEEKLY

CHT inspection from DCA (with Medical) via CHENG and XO to CO.

Bacteriological samples of potable water system to CO via XO.

Formal berthing and head sanitation report to CO via XO.
Report of 3M PMS and spot checks accomplished to 3M Coordinator.
Report of DC maintenance and spot checks accomplished to DCA.

BIWEEKLY

Formal galley inspection report to CO via XO.
Pest control surveys report to CO via Food Service Officer and XO (try to do pest control survey of each galley every two weeks to see if spraying is needed).
Sanitation report to CO via XO. Included within this are daily waters, weekly CHT, berthing, bacti results of potable water system, biweekly galley inspections, pest control surveys, monthly barbershop, laundry, storerooms, and refrigerator inspections. (Note, include monthly inspections in the next sanitation report.)

MONTHLY

Barbershop inspection report to CO via XO.
Laundry inspection report to CO via XO.
Dry storeroom inspection report to CO via XO.
Refrigerator decks inspection report to CO via XO.
PQS training report to CO via the Training Officer (Ops Boss).
Radiation Health report to CO via Radcon Officer, Repair Officer, and XO (if you have a radiation health program).
Inspection of controlled medication to CO from head of Controlled Substances Board. (You don't do this inspection or report, you just make sure that it is done.)

QUARTERLY

Inventory of all emergency support equipment (first aid boxes, etc.).
Report of planned quarterly inservice and crew training to Ops boss.
Report of next quarter's employment schedule (crew's medical training, medical inspections) to Ops boss.

ANNUAL

Report of controlled equipage inspection to CO via SUPPO (you check all the controlled items that you have custody cards for—e.g., typewriters, stretchers—and make sure that they are all there and in good shape).
Report of plan for inservice and crew training to Ops boss.
Report of next year's employment schedule to Ops boss.

SITUATIONAL

Accident and Injury reports to CO via XO with copies to Safety, the department head, and the OOD (there will probably be many daily).
Heat Stress survey to CO via department involved.

EXTERNAL REPORTS

MONTHLY

Morbidity report of medical services to BUMED. All the information on completing the form and where to send copies is in BUMEDINST 6300.2A. All the information is found in the Sick Call log. You need to double-check this to avoid strange numbers or wrong categories.

QUARTERLY

If you are the health care supervisor for an IDC, MO, or PA, you must submit a report on the quality of the health care provided to the ISIC or TYCOM, whoever signed your appointment letter.

Dental readiness report to TYCOM (if you don't have a dentist on board).

Lifesaving medical equipment safety-checked by a biomedical repair technician and marked on tag.

SEMIANNUAL

De-rat certification done by local DVECC. **DO NOT** let this expire.

ANNUAL

Submit budget request for medical equipment over \$5,000 to TYCOM.

Submit report of non-occupational and occupational exposures to ionizing radiation to BUMED, on form NAVMED 6470/1, IAW P-5055. Submit report of ionizing radiation for each specific program to required superiors. See parent instruction for nuclear weapons and nuclear reactor programs for formats and due dates.

Submit copies of NAVMED 6700/3's to TYCOM via chain of command.

SITUATION REPORTS

Disease Alert Reports submitted IAW NAVMEDCOMINST 6220.2A. The instruction lists all reportable diseases (malaria, hepatitis, chicken pox, etc.) and how and who to report them to. If you think you should info someone on a report, go ahead and do so.

Heat/Cold Injuries are submitted on form NAVMED 6500/1, IAW OPNAVINST 5100.20 Series.

Submit a TB contact report to local health department.

A Maritime Quarantine declaration should be submitted to a local health department representative when the ship arrives in a foreign port. Some countries have specific forms that must be used—find out before you leave so that you can stock them. Otherwise, use generic form HSM 13.19.

Chapter 14, PREVENTIVE MEDICINE

Preventive Medicine programs are detailed in the Manual of Naval Preventive Medicine, NAVMED P-5010. Safety and Occupational Health programs are detailed in the Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat, OPNAVINST 5100-19B (2 vols.). The requirements and frequencies of Occupational Health physicals are detailed in NAVMEDCOMINST 6260.3 (CH-1). Each fleet and ship has their own instructions based on the parent instructions. You do not have to memorize the NAVOSH manual or P-5010, but you should be VERY, very familiar with their contents. They are your reference books for preventive medicine and occupational health (a big part of your job). When you have a question in these areas, check these instructions first. They are very complete.

There are several preventive medicine/occupational health programs that Medical is required to manage.

1. Immunizations
2. HIV testing
3. Sexually Transmitted Diseases
4. Tuberculosis (PPD skin tests)
5. Hearing Conservation (Audiograms) (HCP)
6. Heat Stress
7. Asbestos Medical Surveillance Program (AMSP)
8. Routine and reenlistment Physical Exams (See physicals)
9. Laundry/Mess Specialist/Barber Physical Exams (Annual)
10. Occupational Medicine Surveillance Program

Be sure you have a tickler system that runs on a twelve-month cycle. Personnel health records are to be reviewed as individuals report for duty, and a card (or computer record) indicating needed maintenance prepared. Required reports should have a card for each report grouped by the month of the year the action is required; the individual's birthday month is easiest. At the beginning of each month, the corpsman pulls the cards, reviews them, and knows who needs disease surveillance, x-rays, immunizations, and physical exams done that month. It is a great system if properly maintained. If you have access to a computer, all the better. Make it easier on yourself! But keep a back up copy! You'll find you have to back-up everything daily anyway.

A good way to streamline this procedure, if you have enough personnel, is to assign a corpsman to each program. Heat stress, hearing conservation, asbestos, and tuberculosis control programs are time-consuming. If you have one, a PMT will be managing most of these programs, though an assistant is usually needed for a few of the programs (hearing conservation, PPD, and mercury are good ones). A brief explanation of each program follows.

IMMUNIZATIONS

The Medical Department's responsibility is to be sure that all crewmembers' records are kept up to date. You will not be popular for your efficiency. The tickler file must indicate which shots are due in any given month.

Anthrax is, as I write in 1998, the most difficult and complicated immunization ever attempted on a mass scale. Six injections over 18 months, then annually thereafter. It will be your greatest PrevMed challenge.

1. Yellow fever is due every 10 years.
2. Tetanus is due every 10 years after the initial two shots, one month apart. Note that for a dirty wound, tetanus is only good for 5 years.
3. Typhoid comes due every 3 years after an initial series of 2 shots, one month apart. The oral typhoid vaccine is coming on line and the dosing schedule is different.
4. PPDs are required annually.
5. Flu – The Navy's current program of influenza vaccinations requires annual flu shots. The message containing ordering information for the New Year's vaccine comes out around August.
6. MMR – All crewmembers should have received MMR in boot camp, but, if not, give them one on the ship. This is especially important and required for all medical/dental personnel. Measles is an increasing problem nationwide.
7. Hepatitis – All medical/dental personnel must also have their Hepatitis B vaccine 3-shot series. (Many don't.)
8. Other immunizations, like HepA and Varicella, may be mandated in your neighborhood soon.

For all the up to the minute immunization requirements, check NAVMEDCOMINST 6230.3 and your message traffic.

SEXUALLY TRANSMITTED DISEASES

For some sailors, getting VD is a rite of passage; for others, it's an occupational hazard of sea duty. Whatever it is, it will be a concern of yours. In this day and age, with the threat of AIDS, venereal disease is a serious matter. This is a program that requires almost continuous education to warn sailors of the risk of VD and that their risk of acquiring AIDS increases with VD. The official Navy doctrine is sexual abstinence, but, if you want credibility, don't force this too much. Make sure the word gets out about safe sex, especially before liberty port visits. Make condoms readily available. Give them to division officers, CPOs, and LPOs to pass out at quarters. Have boxes of them sitting out in Medical and divisional office spaces, and have your corpsmen hand them out in berthing. If condoms are not easy for sailors to get, they won't use them. When they get a case of VD, make treatment easy and confidential. You don't need to be treating the complications of untreated VD, and no one needs to know who came down with what.

Once treated, each VD case must be put in SAMS (if available) or in an STD log. Depending upon the total number of cases (some ships have rates of 20-30% during deployments), this can be a large program. Your STD log will be looked at during every medical inspection that you have, so have it kept current and accurate. On some ships, the numbers of STDs are large enough to make this almost a full-time job. Each fleet has its own STD instruction stating how to treat each type of STD. Read it so you will be treating STDs correctly. The instruction also tells you how your STD log should be maintained.

For each STD case diagnosed, you must list how the diagnosis was made, the treatment regimen, when the test of cure was done, and the results. Also at the time of initial diagnosis, you must do an RPR and HIV test. You must repeat these tests 60 days after diagnosis and note the results. Not putting the results of tests in the STD log is a common error. For GC and syphilis, contact reports to the local health department are required if civilians are involved. If the contact is active duty, use the contact report and send to the Medical Department of the sailor's command for follow-up. Syphilis also requires a DAR (see Reports).

HIV PROGRAM

Instructions mandate that all deployable personnel (everyone on your ship) will maintain a current (within one year) HIV test. This can be very critical prior to deployment. For practical and political reasons, no HIV-positive personnel are allowed overseas. If this question is asked in a foreign port, the standard reply is that all personnel of US Navy ships are tested annually for HIV, no HIV-positive individuals are permitted to remain on board, and the ship has had its annual HIV test. You may not show them HIV rosters or medical records.

The easiest way to complete your annual HIV testing is, first, to see how the local hospital handles HIV tests. You must submit your specimens the way they want, or you'll be redoing them. Expect to do a blood draw of the entire ship, once a year, to maintain this program. Get a computerized roster of the ship and pre-made labels with, at least, name and SSN from the ship's data center (these people can do wonders with computers). Plan to close Medical for as many days as it will take to do your entire ship, using almost all your people as phlebotomists (2-4 days). You will also need at least two people with typewriters to type the rosters and two people to check the labels as they are turned in. This is a very manpower-intensive evolution, and the paperwork **MUST** be 100% accurate. If there is any discrepancy between the roster and the blood specimen, it will be rejected and the person must be redrawn. Once the HIV results come back, they must be entered in both the medical and dental records on the SF-601 (Immunizations) in a specific format (buy a stamp for this, it saves time).

If any of the HIV tests are positive, the command will receive a letter from Washington, notifying you of this fact and directing where the member goes for an examination and confirmation test. The XO or the CO will decide who does the actual notification. It will probably be you. Learn the basic facts of HIV and the Navy's program because the infected individual will ask at some point. The person does not have to be transferred that day and shouldn't be. There is up to a week's leeway to get affairs in order before checking out from the command. This is one piece of information that must be kept strictly confidential, and the CO/XO will tell only those who have a need to know. The individual will be transferred to one of the Naval hospitals for evaluation. If healthy, the sailor will be stationed in a shore facility; medical retirement awaits those who are unhealthy. No one who is HIV positive may be stationed on board ship or overseas.

MALARIA

A word about malaria prophylaxis: unless you are going to be entering an endemic area, malaria prophylaxis will not be necessary. The Navy Environmental Health Center in

Norfolk publishes the Pocket Guide to Malaria Prevention and Control (NEHC-TMC6250.98-2). The Malaria Blue Book is also available on the street and is a very complete reference about malaria—how to do smears, treatment, and prophylaxis regimes. Since resistance to current malaria drugs is constantly changing, you must check with your local NEPMU for the most current information on the risks and medication regimes for any geographical location. If you are going to be giving malaria prophylaxis, you must establish the procedures for taking malaria tablets as well as monitoring for compliance. Before starting malaria prophylaxis, all health records should be screened for G6PD deficiency testing.

If you are or have been in an area with malaria present and a patient presents with a fever, always rule out malaria with a thick and thin smear, and save the slides for the NEPMU. Malaria can present with a wide range of symptoms, and you must keep a high index of suspicion for this disease. Falciparum can be fatal within hours if not treated promptly. Any patient being treated for malaria should be under a physician's care as soon as possible and be monitored in an intensive care setting. This may require a MEDEVAC to a ship with ICU capability or to shore.

NOTE: You should maintain a master list of all personnel by blood type for your walking blood bank (ADP can give you this roster) and a similar list of all G6PD-deficient personnel.

PPD AND TUBERCULOSIS CONTROL PROGRAMS

Yearly PPDs are required for all shipboard personnel (shore-based personnel are every three years). You can set up the tickler program to test people on their birthday month, by division, or however you want. A person with a positive PPD must undergo a Medical Officer's evaluation. This generally consists of a chest x-ray, LFTs, a CBC, and a brief physical exam to test for active disease. Include a screening test for HIV antibody.

If TB testing reveals a new reactor able to take INH, then give INH for six months. Remember that new reactors over age 35 should NOT be placed on INH prophylaxis unless extenuating circumstances increase the likelihood of active disease. LFTs should be drawn at baseline and then as indicated. See NAVMEDCOMINST 6224.1 for details of the program. If no side effects are noted after a month, a monthly questionnaire is enough to check for side effects and get the prescription refilled. Once they have completed a six-month course of INH treatment, they are simply put on a tickler and only complete an annual questionnaire. **They are not given PPDs in the future. It will be positive and uninterpretable.** No annual chest x-ray is required.

Anyone with a positive PPD and physical signs or symptoms of active disease should be referred to a pulmonary specialist or internist for treatment. A DAR report should also be submitted. A tuberculosis contact investigation report (MED 6224.9; reference BUMEDINST 6224.1) will be sent by the hospital on all active TB patients. When you discover a new PPD reactor, you should check the PPDs of crewmembers in the same berthing compartment and/or recommend that the family be tested to try to find the source of the conversion.

Chapter 15, OCCUPATIONAL HEALTH PROGRAMS

In addition to the above programs, specific occupational health programs will be inspected by numerous individuals. What follows are the basics of each program's management as well as the instructions to read for more detailed information.

When trying to determine if someone is occupationally exposed to a physical or chemical hazard, you will need to rely on the results of the Industrial Hygiene Survey (IHS) and the Industrial Hygienist's (IH) interpretation of those results. The IH can tell you which individuals are occupationally exposed to the various hazards and need to have occupational physicals and medical surveillance. Obviously, if you have an IH on board, it's easy; if not, you have to plan time to consult with one. Some medical surveillance determinations are based on job description; e.g., everyone on the Otto fuel spill team needs Otto fuel PEs, even if there is never a spill. Other determinations are based on location, e.g., all personnel working in the fireroom are on the hearing conservation program. Other determinations are based on actual exposure levels that the IH obtained during surveys.

For hazard-based medical surveillance, a medical examination shall be provided when the action level (1/2 of the Permissible Exposure Limit) of the hazard is exceeded and when the exposure duration exceeds 30 days per year. The specific elements for medical surveillance exams for specific hazards and certification programs can be found in NEHC-TM 91-5 Medical Surveillance Procedure Manual and NOHIMS Medical Matrix. There is also a medical screening matrix that tells you what physicals, tests, and organ systems to concentrate on for each type of chemical or physical exposure; see NAVMEDCOMINST 6260.3 (Ch-1). Additionally, general guidance on medical surveillance is found in section A3-4 of OPNAVINST 5100.19B.

As mentioned before, you can make up special SF-600s for each type of occupational health PE you need to do. Depending upon your type of ship, your occupational health program can be VERY large. If that's the case, there is probably an IH on board to assist.

RADIATION HEALTH PROGRAM

If you are on a nuclear-powered ship, a tender, a ship with nuclear weapons, or have anyone who takes x-rays, you will have a radiation health program. If you have a radiation health officer or radiation health technician, he or she will run the program, but you will be responsible for it. There are three programs, and each is slightly different, with different dosimetry (radiation measurement badges), reporting, and inspection criteria. NAVMED P-5055 is the bible of radiation health—the one the inspectors have memorized. There is also a manual for the nuclear power and the nuclear weapons program. Be very familiar with them too, if they are applicable. The latter two are confidential pubs, so you will find them in your safe or the parent department's safe.

As you can see, this can be a large or small program depending upon how many people are badged. Before someone gets a dosimeter, they must be trained and have a radiation physical (see Physicals). Personnel also require internal monitoring prior to entry into the radiation health program, upon termination from the program, and upon

transfer from the command. Internal monitoring is done by the nuclear division on tenders and shore facilities. You need to make sure that it was done and filed in the person's medical record. All radiation exposure received will be noted on a DD 1141, which is maintained in their health record. Even if the radiation exposure is zero, you must enter this as 00.000 Rem (the nukes insist).

There is also a monthly report to the CO via the XO and the radiological controls officer listing all the radiation exposure for the month and any danger levels of exposure. The nuclear program is very safety conscious, to keep exposure As Low As Reasonably Achievable (ALARA). You must also submit annual reports to BUMED (and to any authorizing authority) for all radiation programs you have on board. There are specific formats and deadlines for these reports. Always use the required format, and **DO NOT** be late with your report. If you cannot submit it in time, send a message stating why and requesting an extension (e.g., dosimeter results not back). **DO NOT** think that they won't notice if you are a few days late or use your own format. They **WILL** notice and send a nasty message to your command blasting the command and letting the whole world know. Your CO **WILL NOT** be pleased with you.

There are also dose transmittal letters and situational reports for when people transfer or have exposures over the limits. Read about what reports are required, when, and what procedures to use. If you have access to a computer program that generates these, get it and use it! Always keep on top of this program, since all your reports are time-critical. If you are late, that is a mistake that you can never correct, and it will be a discrepancy on every inspection you ever have. The nuke inspectors check the previous several months or years on their inspections.

There are also internal and external audits that must be done on your radiation health program. The XO does the internal one every six months. Someone from another ship or command with a radiation health program will do the external audit every six months. You have some sort of inspection every quarter. You or your radiation health officer will also be doing external audits.

It is too hard to go into much detail on this here (this is taught as a 2 or 6 week course in Groton, CT). Read the required instructions as soon as you can so you don't miss a report. Talk with a radiation health officer who has an established program. If you can take the course, even better.

HEARING CONSERVATION

Hearing conservation is an area of confusing and contradictory information. What follows is an attempt to simplify some of the gibberish in the instruction (OPNAVINST 5100.19B).

The **PURPOSE** of the hearing conservation program (HCP) is to identify individuals exposed to noise hazardous environments and monitor their hearing to prevent progressive hearing loss. As part of this program, the Medical Department is responsible for issuing hearing protection in the form of earplugs to all personnel potentially exposed to hazardous noise. On a ship, this encompasses the entire crew. All earplugs are to be fitted and issued by the Medical Department, not given to each department to fit its own. Earmuffs are generally made available through the Safety

Department but must be purchased by the individual department; Medical does not provide this high-cost item.

This program will be reviewed at every Engineering inspection and Safety inspection. If you set it up as described below, you won't have a problem at inspection time. Again, keep up to date because you can't catch up if you get behind.

Continuous high-level noise results in permanent high frequency nerve deafness. Personnel at risk for hearing loss from high noise exposure levels are Engineers, machinist mates, deck personnel who are grinders, scrapers, or chippers, and flight deck crewmen.

A noise level survey should be available for all potentially hazardous areas to identify areas and tools producing decibel (dB) readings above acceptable levels (84 dB for single hearing protection and 115 dB for double hearing protection). All such spaces should be posted as "NOISE HAZARDOUS AREAS" with the recommended type of protection needed in that space (single or double). These tags and posters should appear EVERYWHERE a hazard exists and ON everything that produces hazardous noise.

It is the Medical Department's responsibility to ensure that these are properly posted. Even though your department may not be responsible for obtaining the signs, you, as Medical Officer, will be responsible if they are not there. Thus, once again, you become a "policeman" (the guardian angel of earplugs). If you are not a good policeman, rest assured that you will be burned. Enough inspections occur in a one-year period to guarantee that you will be hit at least once! An industrial hygienist will tell you where these signs should be posted after performing appropriate surveys. Once the survey is done, it does not have to be redone unless changes are made in the space, such as during an overhaul.

Don't depend on the Engineering or Deck Department to do the job. They view this as a "medical problem" and will try to ignore it. You will find the same prevailing attitudes when you try to arrange and perform annual audiograms for "at risk" personnel.

Upon entrance to the Navy, everyone receives a reference ("baseline") audiogram that is recorded on DD Form 2215. Audiograms performed at MEPS or on the back of the SF-93 cannot be used as baseline because they were not done according to ANSI standards. Prior to assignment to noise hazardous areas or operating noise hazardous equipment, a baseline audiogram, recorded on a DD 2215, must be in the medical record and the individual placed in the HCP. Once assigned to noise hazardous areas, the next follow-up audiogram must be performed within 90 days and is recorded on a DD 2216.

Thereafter, these personnel receive annual audiograms that are recorded on a DD 2216. Projecting the dates for these and filing a tickler card helps identify them; actually getting people to have the studies is as easy as swimming up a waterfall. (Detailed information on the HCP can be found in Appendix B4-B of OPNAVINST 5100.19B or the updated DoD INST 6055.12, 26 March 1991.)

Engineers are the worst offenders. They work long hours and, when off-watch, tend to crawl away to hibernate. They get dizzy from the altitude if they go above the first deck.

Getting them out into daylight is virtually impossible; they are afraid of being melted by the sun.

When you finally draw them in and accomplish the annual audiogram, the results are compared to the reference audiogram. A significant threshold shift (STS) is defined as a change of 15 dB or greater at any test frequency from 1000 to 4000 Hz in either ear, or a change in hearing averaging 10 dB or more at 2000, 3000, and 4000 Hz in either ear. When an STS is noted, the subject is kept out of the noise hazardous area for 15 hours and a repeat 15-hour NOISE FREE audiogram performed. If the STS persists, examine the patient's ears (if you haven't already) and order a 40-hour NOISE FREE test. Many times, the loss will correct itself, and everyone is happy. If not, a referral to ENT is needed, with double hearing protection utilized until the referral is completed. Further guidance on reestablishing the baseline audiogram and referral criteria are found in Appendix B4-B of OPNAVINST 5100.19B.

Most decreases in threshold are due to personnel non-compliance with earmuffs and earplugs. If they are not used, they don't help. Senior enlisted personnel and officers are the main offenders. You really need to watch the chiefs; they think they are invulnerable. On your walk-through of the ship, look to see if people are wearing their hearing protection and if not, make them. A little motherly nagging goes a long way.

Anyone showing progressive high frequency hearing loss, despite compliance with hearing protection guidelines, may need to be permanently removed from noise hazardous areas. This is not your decision alone but must be made with the concurrence of an audiologist or ENT specialist. A stable, high frequency loss in one or both ears does not necessarily preclude working in hazardous environments, as long as double hearing protection is worn and annual audiograms show no changes.

Audiograms must be recorded on the correct form. It is important not to confuse the DD 2215 with the DD 2216. The forms appear similar, with differences probably meaningless to you. But the difference will matter a great deal to your hearing conservation program inspector.

A few important points about hearing control:

1. Eighty-four decibels is the limit above which hearing protection must be used to prevent hearing loss. Earplugs attenuate approximately 20 dB and earmuffs 30 dB, if fitted and worn properly. In a noise-hazardous area with readings over 105 dB, earmuffs should therefore be worn. If over 115 dB, both earplugs and earmuffs must be worn. A level of 140 dB "impact noise" is the highest allowable.
2. Remember that all hearing loss is not secondary to nerve damage. Examine patients who present with significant threshold shifts in their audiogram or unilateral hearing loss for other treatable causes of hearing loss, e.g., inner ear infections, packed cerumen, etc.
3. Tools that produce hazardous noise must be labeled as such. Personnel checking out these tools are required to produce their fitted earplugs or earmuffs as proof that they have hearing protection.
4. Personnel should not use foam earplugs on a continuous basis. They quickly become soiled and can produce otitis externa. They are intended to be throwaway inserts and used on a temporary basis.

5. All sonar technicians must also receive an annual audiogram. This exam must conform to international standards. For information about referrals and disqualifications refer to OPNAVINST 6260.2.

Engineering inspectors look at the hearing conservation program to make sure you have up to date tickler files demonstrating how you track the 90-day and annual audiograms. The 90-day audiograms are the key here; they are hard to track and hard to get done in 90 days. One way to accomplish them is to place new crewmembers on the tickler immediately when they check in to Medical, if they are assigned to a division in the HCP. If the individual is an E-3 or below, schedule their 90-day audiogram for six months after they arrive. (Remember they are mess cooks for 90 days.) E-4 and above personnel can be scheduled right away to come back for their 90 day audiogram. You will need to set up a similar system for personnel who transfer between divisions; i.e., they must have Medical sign their transfer sheet. The annual ones are easier. Make sure you have all applicable ship's instructions, BUMED, SURFLANT/PAC, and OPNAV, flagged for easy demonstration if needed.

ASBESTOS PROGRAM

The asbestos surveillance system can be extremely confusing. An attempt to outline the major points follows. For complete details check the NAVOSH manual.

Asbestos surveillance questionnaires are supposed to be filled out by all personnel as part of their work history data sheet OPNAV 5100/15, which is then reviewed by Medical. This information is generally inaccurate, and therefore it is difficult to monitor those at risk. Personnel with known past exposure to asbestos or those who work on asbestos rip-out teams are required to be on an asbestos surveillance program. Not everyone qualifies for yearly checkups; it depends upon their asbestos exposure levels.

A good way to do this is to identify anyone who was in an asbestos surveillance program and keep them enrolled for their entire time in the service. For those who think they have been exposed to asbestos, complete a careful work history to see if they meet the exposure criteria outlined in the asbestos section of OPNAVINST 5100.19B. If they don't meet the criteria (walking through an asbestos area, one time exposure to asbestos, doesn't count), don't put them on an asbestos surveillance program.

An easy rule of thumb is to only request annual asbestos evaluations for those personnel actively working with asbestos at the moment, e.g., personnel on the asbestos rip-out team. Note: chest x-rays are not always annual, but are based on time from first exposure and age. Check Appendix BI-C, page BI-C-10, of OPNAVINST 5100.19C for CXR frequencies. If you don't have to get a B-reader CXR, your asbestos program will be much easier to maintain. Anyone who is not actively working with asbestos, but who meets the exposure criteria for asbestos, should be examined with CXR Q5 years and also upon separation from the service. This makes it much easier to set up your tickler system. For clarification of the ASMP requirements, see Appendix BI-C page BI-C-10 of OPNAVINST 5100.19C.

Rules and regulations governing asbestos control, as translated into English:

1. Rip-out teams are to be designated in writing, and personnel identified by a sheet in their health record. They require a preplacement asbestos physical. They should have attended school to train in asbestos rip-out procedures.
2. When asbestos rip-outs are performed, they should be done wet to keep airborne particles to a minimum.
3. Local exhaust and dust collecting methods are to be employed in spaces where asbestos is being removed. Use of portable hoods and vacuums to keep the dust and particulate matter to a minimum may be needed.
4. When lagging or insulation is replaced in shipyards, replacement should be with asbestos-free materials. (Check with the Engineering Department to see what is being used for insulation.)
5. Asbestos waste, including clothing, must be removed and placed in a sealable, closeable plastic container and properly labeled.
6. NAVAL SHIP TECHNICAL MANUAL (NSTM) chapter 635 outlines the gear personnel are to wear during rip-out. These include overalls, respirator, head covers, gloves, facemasks, and foot coverings. These are uncomfortable, but you must make certain they are used.

From a medical viewpoint, you will need to obtain a surveillance questionnaire on every person aboard to identify those with prior or current exposure to asbestos. For those workers going to asbestos hazardous duty, a preplacement evaluation is necessary. This initial history is documented on DD 2493-1; subsequent histories are documented on DD 2493-2. The evaluation must be done within thirty days and includes:

1. History.
2. A physical examination of the chest with special emphasis on the presence of persistent dry rales or crackles at the base of the lung.
3. PA chest x-ray, 14 x 17", a special B-reader x-ray, interpreted in accordance with ILO/UC International Classification of Radiographs. Requested on BUMED 6260/7 (May 90), NSN: 0105-LF-009-9900.
4. Pulmonary function tests (FEV-1 AND FVC) on all people before they are allowed to work in an asbestos hazardous environment.
5. All of the above information is also documented on the asbestos medical questionnaire, BUMED 6260/5, NSN: 0105-LF-009-9800, which is maintained in the health record. Note: you must send one copy of this form to the Navy Environmental Health Center for entry into their Occupational Exposure Data Bank.
6. Make certain to document the patient's smoking history and write in the chart that "the patient has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure."

Here is a short list of things to look for when trying to rule out asbestosis, or asbestos-related disease. The reference is Appendix B1-K of OPNAVINST 5100.19B, Diagnosis of Asbestosis and Related Disorders.

1. Shortness of breath on exertion.
2. Basal respiratory dry crackles and rales.
3. Interstitial changes on chest x-ray.
4. Decrease in FVC or diffusion capacity.
5. Digital clubbing.

Usually a ten-year or greater exposure history is necessary for a real pulmonary asbestosis. This, however, does not mean that someone with heavy exposure over five years won't get it. Check everyone on an individual basis.

Other things to watch out for are that all the records of personnel in the asbestos program are labeled on the front of the jacket. Also, you must set up a tickler to track B-reader x-ray results. These x-rays are sent to specially certified personnel, and it takes at least three months to get the results back. So you need to track them because the physical isn't done until all the paperwork has been completed. Also, remember to schedule annual training for those personnel currently working with asbestos.

The asbestos control program may sound very confusing. The questionnaires are only about 50% accurate. You will miss people who should be enrolled in the program because they did not respond appropriately to the questions. Likewise, you will put people in the program unnecessarily because they put down that they have a 200-year history when, in reality, they have never seen an asbestos particle. Glide with the tide, and do the best you can.

MERCURY CONTROL

Any ship with a Dental Officer or a calibration lab will have free mercury as a component of the amalgam base used for restorative dentistry or for the calibration of gauges. On safety surveys and command inspections, check how the mercury is handled. The working area must be well ventilated with a fresh air exchange and an outside exhaust. By regulation, the air should be sampled periodically for mercury vapor. The department responsible for the space will probably do this, but you should be aware of the regulation. The mercury should be kept in tightly sealed containers away from heat and flame. Last, but not least, there should be some form of mercury clean-up procedure to be followed in case of a spill, e.g., spill kits. Dental units on some of the smaller ships, such as LPDs, will have mercury in self-encapsulated containers. Mercury is broken out only as each unit is mixed, preventing the dangers and hazards of a mercury spill. Further details in NAVMEDCOMINST 6260.2, 07 Nov 88.

Medical's role in the mercury control program is to ensure proper handling procedures for elemental mercury in dental facilities and calibration labs to minimize personnel exposure and environmental contamination. Medical must also look for other sources of mercury aboard ship—old King gauges, old manometers in calibration labs, mercury thermometers in HM response bags. If present in any of these places, there must be a warning sign in the space or attached to the item. Routine medical surveillance for mercury exposure among dental/calibration lab personnel is not required but may be prescribed based on biological monitoring in a spill situation. Biological monitoring must be done by urine mercury analysis performed at one of the Navy consolidated IH labs. Ships with calibration labs will have the mercury control program inspected as part of a QA inspection, as well as during Safety inspections.

LEAD CONTROL

Lead is a material that is long recognized as a health hazard leading to kidney and nervous system damage, reproductive hazards, and blood disorders. While much work

has been done to reduce the amount of lead materials on ships, there is still plenty of lead in routine use. Lead is found in some of the lead-based paints still in use or in paint already present, also in foundry work, welding solders, radiation shielding, batteries, ballast, small arms ammunition, and weights.

The individuals who are generally exposed are foundry workers, some painters, and some welders. The industrial hygienist can tell you which areas and jobs are lead exposure areas so that proper protective measures (respiratory, ventilation, protective clothing, etc.) can be taken.

Personnel who are exposed to lead are required to be in a lead surveillance program. This consists of a preplacement physical with emphasis on the gastrointestinal, renal and neurological systems. Laboratory analysis includes CBC, BUN, creatinine, blood lead levels, and zinc protoporphyrin level (ZPP). Lead levels are monitored every six months. A physical exam is done only if a blood lead level is 30 micrograms/100 ml or higher. Further details are found in OPNAVINST 5100.19C.

HALOGENATED HYDROCARBONS

Halogenated hydrocarbons are included as a specific entity because most personnel are unaware of their toxic potential. There have been articles from the Navy Safety Center documenting halogenated hydrocarbon-related casualties on board Navy vessels. Special attention must be paid to refrigerants, solvents, and gases in liquid form such as Freon, Isotron, and TCPFE. They are widely used as paint thinners, refrigerants, fumigants, propellants, pesticides, dry cleaning solvents, etc.

Halogenated hydrocarbons can cause severe kidney and/or liver damage by low-grade chronic exposure through contact or vapors. An acute, heavy exposure can result in hypoxia and death (these elements are heavier than oxygen and may displace oxygen completely). Skin and eye exposure can be very irritating and cause conjunctivitis or severe contact dermatitis. High temperatures will degrade vapors to extremely toxic and irritating gases.

The following precautions are to be checked by the Medical Officer to ensure the safety of all personnel. Monitor and advise. Engineering and other departments involved should obtain the necessary protective equipment and conduct training.

Check:

1. Proper labeling of containers.
2. Adequate ventilation.
3. Oxygen breathing apparatus utilization during fires where vapors may exist.
4. Use of an approved organic vapor cartridge respirator when handling organic agents by all personnel. (Departments may ask for surgical masks, which are not adequate, so don't provide them.)
5. Air breathing equipment in any closed space where these materials are utilized.
6. Goggles, skin coverings, gloves, boots, and headcovers must be worn, especially when handling liquid halogenated hydrocarbons.

On inspection, you should occasionally ask to see the protective equipment and ensure that people are aware of its use. Refrigeration mechanics are especially lax in their

dealings with refrigerants. They all seem to be under the impression that Freon is non-toxic and innocuous. Casualties have been reported from Freon gas inhalation, usually from asphyxiation. Freon can also cause a cardiac sensitization leading to ventricular fibrillation.

All personnel who are authorized to work with halogenated hydrocarbons may require annual physicals to ensure that they have received no ill effects from them. Check the NEHC-TM 91-5 for each type of halogenated hydrocarbon; the medical surveillance requirements are slightly different for each. Personnel who handle pesticides must also have their pseudocholinesterase levels checked.

OTTO FUEL II (SON OF OTTO FUEL) PROGRAM

Otto Fuel II is a liquid propellant found in torpedoes. This fuel can be absorbed through the skin or inhaled, and exposure can be fatal. When personnel are working with this chemical, they must use positive pressure air breathing equipment, neoprene aprons and gloves, and freshly laundered coveralls. The room should also be well ventilated.

Personnel who will be working with Otto Fuel II must have a preplacement and annual physical. The occupational history must inquire about previous occupational exposure to nitrates. The review of medical history must check for the presence of cardiovascular disease, hypo- or hypertension, and frequent or severe headaches, particularly migraines. The clinical physical examination emphasizes the cardiovascular and neurological systems. Further details of this program can be found in the TYCOM instructions as well as NAVMEDCOMINST 6270.1

HEAT STRESS

This area of responsibility is shared with the Engineering Department and is the most important program for Engineering from an inspection point of view. The Medical Officer is responsible for prevention of heat stress casualties. The machinery rooms, especially steam plants, can run very hot when "lit off." Temperatures climb to well over 100°F, and the humidity is high. Also monitor the laundry and scullery spaces—additional sources of thermal stress, although to a lesser extent. The idea behind a good heat stress program is to prevent heat casualties by monitoring the thermal conditions and limiting stay times to allow personnel to "cool down."

Medically, the heat stress program involves measuring heat stress of the workspace and calculating proper stay times for the personnel in those areas. Anytime the dry bulb temperature in Engineering spaces exceeds 100°F, Engineering will measure a WBGT reading to determine heat stress levels (Medical takes the readings for the rest of the ship). This is submitted to the CO through Medical, and you retain a copy of this for your records.

A WBGT meter (heat stress monitor) uses a dry bulb, a wet bulb, and radiant heat measurement simultaneously to arrive at a "WBGT index." This number is then referred to the Physiologic Heat Exposure Limits chart (the PHEL chart), which consists of a series of curves labeled A, B, and C, corresponding to physical activity levels, "C" being the most active. The curve has a WBGT number on the ordinate and time in hours and

minutes on the abscissa. By referring to this chart, one can find the stay time of an individual in the area in question at a particular WBGT reading and activity level. Once stay time is calculated, the CHENG gives the report to the Medical Officer and the CO. The watch-standing duration will be adjusted to achieve those recommendations. As Medical Officer, you make any additional health recommendations to the Commanding Officer that you feel necessary.

Regulations state that once the stay time is below four hours (a normal watch-standing period) a survey should be repeated at the shortest stay time interval calculated. If the stay time is below two hours, a rest period of twice the stay time is indicated, never greater than four hours at a time. Thus, if the stay time were calculated to be one hour, the rest time, in a cool area (room temperature) would be two hours. When stay times are very short, watch out for heat-stressing the surveyors as they run back and forth to take readings.

Engineers generally will perform a repeat survey when they change the operating speeds or conditions of the plant, or when the ambient air temperature falls and the space cools significantly. Basically, they do that to get their watch increased to four hours whenever possible.

If you are fortunate enough to have a preventive medicine technician aboard, the heat stress program should be up to snuff, and you will not have problems. Most ships, however, will only have a corpsman trained in a short school in "how to" use the WBGT index. In that case, personally check the heat stress procedures to ensure that all guidelines are followed. Keep a record of all heat stress tests performed throughout the year; you are required to keep these on file and will need them for SURFLANT/PAC inspections. Heat stress tests must be kept for one year, but inspectors love seeing two years worth of readings.

Many Engineering Departments, COs, and XOs feel that Engineering is responsible for the actual readings in Engineering spaces, but that the Medical Department is responsible for the rest of the ship as well as monitoring what is done in the Engineering spaces. The instruction is ambiguous enough to leave many points open to interpretation by any given reader.

However, Medical Department involvement with the program does include more than monitoring. Medical can best serve the Engineers by coming down (every hour if needed) to clinically ensure that personnel are not being physically exhausted by the environment. The Engineers easily take the readings, but it is desirable for a medically trained person to tell them if someone is being heat stressed beyond their limit. Current instructions do not provide clear tasking for this and presently it is a moot point. This is generally not a problem in most Engineering plants, since the Engineering inspectors pay attention to the heat stress program and Engineers work hard to try to prevent heat stress casualties. Even if Engineers cannot comply fully with stay times due to manning constraints, they do rotate personnel to cooler areas for those down times and force them to drink fluids.

Periodically inspect areas at risk to be sure thermometers actually exist and are in place. Thermometers should be placed in the area where personnel stand watch and perform most of their work, not in the hottest areas. Chilled water fountains that work properly

should be provided for personnel in heat stress environments. Exhaust hoods and ventilating vents for cool air are important and should be properly maintained.

A swinging bulb psychrometer should be available to act as a backup if the WBGT meters fail (even though no longer technically legal). Be sure all personnel involved are familiar with its use. Check the latest heat stress survey conducted by the IH to identify heat stress areas. Anytime a ship goes into the shipyard, it should have a repeat survey performed to document any changes, especially when extensive engineering work has been done.

Anytime a heat casualty occurs, Medical is required to report it on a NAVMED 6500/1 form. Further details on these programs can be found in OPNAVINST 5100.20C and TYCOM instructions. Each ship should also have an instruction governing heat stress. Refer to it, especially if you wish to update it with new instructions. Always make sure the ship's instruction refers to current, not outdated, instructions. The information will be quite different in many cases.

Finally, what do Engineering inspectors look for? For the heat stress program, be able to show them at least one year of heat stress tests for Engineering, the laundry, and the scullery. Make sure the heat stress logs in the laundry and scullery are complete and that you have the corresponding heat stress test for all dry bulb temps over 100°F. Have your working, calibrated WBGT meter with its recharger available, and show them the operating manual. Be able to produce the lesson topic guides and rosters for heat stress training done for Engineering personnel and WBGT training done for the IC-men. Also have the file of heat stress casualty reports available, if you had any.

In addition, make sure you have all applicable ship's instructions, BUMED, SURFLANT/PAC, and OPNAV, flagged for easy demonstration if needed. If all of the above is out and waiting for the inspectors, they will be overwhelmed by your efficiency, and the CHENG will love you and will get the Engineering Department up for audiograms, shots, etc.

Chapter 16, SAFETY PROGRAMS

In addition to being “czar of trash,” you are also the ship’s resident “lord of safety.” With that title (something akin to Smokey the Bear) comes the responsibility of making sure that the crew lives and works in a secure environment and follows good safety guidelines. A number of specific programs directly related to the occupational health field include asbestos control, heat stress, and hearing conservation. Some of these have already been mentioned but more details follow in the upcoming pages.

Safety is an area that entails everything from making sure every deck has a nonskid surface to the proper handling of dangerous chemicals. Ships are floating industrial complexes. There are safety hazards at every bulkhead. We will not outline every hazard but instead present a few topics you need to know. References are included to help you find more detailed information.

Safety is a shipwide responsibility. Although the Captain has the ultimate responsibility, a Safety Committee (composed of departmental safety officers, usually senior enlisted, and the Safety Officer) and a Safety Council (composed of the department heads and Safety Officer) are appointed to identify safety hazards and correct them. As Medical Officer, you will serve on the council. The Safety Officer, who acts as head of the council, is usually an 0-3 department head. On tenders and CVs, the Safety Officer will be an Industrial Hygienist. Work closely with the Safety Officer for maximum impact on safety practices.

Your direct responsibilities, once again, are those of monitor and inspector. Before you begin, you will need to know what to monitor and inspect. If you don’t have an IH on board, the information provided here will start you off well enough so that you will be able to make a good, thorough inspection of most industrial areas and be able to find flaws. Some programs, such as heat stress and asbestos surveillance, are primarily medical in nature. Others, such as mercury control and poisoning, are less familiar (although not less dangerous) and can be looked up. SURFLANT/PAC instructions provide your best overview regarding toxic materials and their medical significance.

With a little knowledge and a lot of “common sense,” you can become an expert safety inspector. You SHOULD inspect industrial areas twice a month, but you will be lucky if you have time to do them once a month. While monthly is probably adequate to keep you on top of things, remember that letting things go for six months can get you irretrievably behind the power curve!

GENERAL SAFETY ITEMS

Most industrial-related work activities will be in the following areas: welding, painting, metal cleaning, hazardous materials, working in an enclosed space, machining, metal casting, electrical and electronics maintenance, battery recharging, and sewage treatment. Each has some common safety points, such as protective eye gear, protective clothing, protective headgear, and respiratory protection.

EYE PROTECTION

This is an area that needs policing to ensure compliance. Command attention is critical, and the CO/XO needs to “empower” supervisors to enforce personal protective equipment (PPE) wear! Periodic walk-throughs of the industrial spaces to make sure people are using their eye protective devices will help. This will usually fall last on your list of things to do. (If you did everything outlined in this book, you might never sleep!)

Individual departments are responsible for obtaining and issuing proper eye protection. Items to be aware of are:

1. A ship’s standard instruction outlining and enforcing eye protection guidelines should be available.
2. All personnel who routinely work in eye hazardous areas should be issued personal eye protection devices (goggles, safety glasses, etc.).
3. Corrosive chemical work necessitates the use of goggles and a plastic face shield whenever possible.
4. Emergency eye wash stations that provide a 15-minute continuous flush are required in industrial shops, particularly in areas where corrosive liquids are used. SURFLANT/PAC may tell you that eyewash bottles (1-quart size) are adequate in machine shops where corrosives are not kept. The Safety Center, however, will tell you they are not adequate, and you must provide 15-minute continuous flush stations, either by a portable unit or a permanent plumbed potable water line from the ship’s fresh water supply. The correct answer depends upon the inspector.
5. An eye hazardous area must be clearly marked “Eye Hazard Area.”
6. Any welding operation is to be properly screened to prevent arc flash or burn to people not directly involved in the welding operation. Personnel who are in the space where welding is done, either as a fire watch or just working, need to be aware that flash burns can result from a reflected arc off a white bulkhead.
7. Eye hazardous machinery and equipment should be properly guarded whenever possible. (That doesn’t mean putting a Marine guard at the machine!) Face shields and plastic protective guards should be placed over the machines to prevent foreign bodies from flying into the eyes of the operator.

Note: Areas that use portable eye wash stations must perform the PMS on them in strict compliance with regulations. They are to be flushed weekly and refilled. This is to prevent the potential colonization with *Acanthamoeba*, which can cause a severe keratitis that is extremely difficult to treat.

RESPIRATORY PROTECTION

Many areas require respiratory protective devices. It is important to be aware of the general requirements, but the Medical Department is not responsible for procuring respiratory protection. Each department must provide its own equipment and should be monitored closely on a day-to-day basis by its own personnel. Your ship should comply with the following guidelines:

1. A ship’s instruction governing the implementation of the respiratory protection program is required. Written standards should be included in this instruction that govern the selection and use of appropriate respiratory protection.

2. Respirators should be selected according to the specific hazard. Each department is responsible for ensuring proper training of its personnel. The Safety Department should be providing this training, but be prepared for this training to be a Medical Department function if they don't. (Not only are you the czar of trash, garbage, and waste, but you are also the keeper of clean air standards.)
3. Respirators **must** be cleaned between each use. If they are not, they will have paint caked up in them and, sometimes, they grow awful things in the nosepiece.
4. The Medical Officer is, by regulation, to determine if a person is medically fit to wear a respirator. This determination is made based on the worker's health, the type of respirator, and the conditions of respirator use. Since there are very few disqualifying conditions (Appendix B6-H of OPNAVINST 5100.19C), a screening questionnaire on a special SF-600 can be used (Appendix B6-G of OPNAVINST 5100.19C). Basically a young and healthy sailor who passes the PRT is fit to wear a respirator or should not be aboard the ship! While chest x-ray and/or spirometry may be medically indicated in some fitness determinations, they should NOT be routinely performed. A suggested frequency of medical fitness determination for respirator use is every 5 years for those <35 years of age, every 2 years for those 35 to 45 years of age, and annually for those >45 years of age.
5. There should be enough respirators available for use in each department. This doesn't always happen due to equipment abuse.
6. The Medical Department is often solicited for "surgical masks" to be used as respiratory protection for any airborne hazard (for example, grinding, painting, spraying, etc.). This is an easy "**no.**" Surgical masks are not respirators. They offer no protection whatever from most noxious fumes, vapors, or micro-spray droplets of paint.

PROTECTIVE CLOTHING

Many toxic materials are handled aboard a ship. The spectrum runs from Argon to Xenon. Many of these materials (mostly the halogenated hydrocarbons) are absorbed readily through the skin and can cause widespread systemic symptoms and problems. A few examples include:

1. Cellulube: This is a former trade name that is now used in a generic sense to refer to all "fire resistant hydraulic fluids" such as those used in weapons elevator machinery and liquid cargo manifold valve operating systems. Some forms of cellulube contain high levels of tri-orthocresyl phosphate (TOCP), which could lead to irreversible motor nerve paralysis. Exposure to cellulube can also cause dermatitis.
2. Halogenated hydrocarbons: Materials such as refrigerants, dry cleaning fluids, solvents, etc. Exposure of skin can lead to drying and systemic absorption and exposure of the eyes can cause severe conjunctivitis. Chronic exposure by inhalation or acute exposure by swallowing can cause damage to the liver and kidneys.
3. Baygon: an organophosphate insecticide, which has the activity of dilute nerve gas. Chronic exposure can result in a prolonged acetylcholinesterase inhibitory activity. Exposure to a large amount in a short period of time can be very toxic or fatal.

Protective clothing is essential in handling these substances. In most cases, a good pair of well-fitting coveralls is adequate. If a spill occurs, the garment can be shed quickly, and the individual can wash the substance off to reduce exposure. Use of special “rubber suits” is unnecessary in most situations.

Rubber boots are needed when working with contaminated water, sewage, or chemicals that cannot permeate rubber. Steel-toed shoes should be standard in all machine shops, welding areas, and for anyone working around heavy equipment. Many big toes have been spared by these “boondockers.”

Hand protection includes not just corrosive-resistant gloves but also shields on saws and machinery. They seem like common sense items, but you will be amazed at the lack of regard for even the simplest protection. Everyone thinks they are careful and that nothing will happen to them until it does.

Hard hats are often forgotten when overhead work is being done. A wrench that falls ten feet and hits someone on the head not only hurts but can play havoc with an IQ. Cranes, booms, and personnel working aloft are all potential bombers of debris. Personnel working in these areas should always wear hardhats. Be sure there are enough functional hard hats to go around. By the way, don't be guilty of inspecting such an area without adequate head covering yourself. It sets a poor example, and most of us don't have any IQ points to throw away.

People who work without safety gear are casualties. They just haven't lain down yet. For PPE to work, they must be used correctly. Do not tolerate personnel who shun safety procedures.

That gives you a basic background. Now let's discuss some of the specific areas to which you need to pay particular attention.

WELDING AREAS AND HT SHOP

The Hull Technician (HT) shop is where most welding and sheet metal work is done. Welding and cutting may also be done in other areas around the ship where needed. Basic protection includes eye goggles, welder's mask, coveralls, and steel-toed shoes. If you see someone improperly equipped, tell the sailor and superiors.

Inspect the HT shop at least once or twice a month and monitor it periodically. Things to look for include:

1. CPR poster mounted on bulkhead.
2. Rubber airway mounted on the bulkhead next to the CPR poster.
3. Flexible local exhaust hoods over the welding tables.
4. A black shield around the welding benches.
5. 15-minute continuous flush facilities for all splash hazard areas. An eyewash station or a plumbed unit should be nearby. Hazard areas for particulate matter, such as machine shops, wood shops, and grinding areas, need at least a quart-size squeeze bottle available for quick eye flushing. Plumbed units or 16-gallon, 15-minute continuous flush portable units mounted on the bulkhead are preferred.

6. “Eye Hazard Area” should be stenciled in bright red letters on the door of the shop. All pieces of machinery that create noise over 84 decibels should be labeled “Noise Hazard,” and hearing protection should be used.
7. Oxygen and acetylene bottles should be marked appropriately and stored correctly. When coming aboard, be sure acetylene and oxygen bottles are stored apart and secured for sea, so they will not roll around when the ship takes a 20 degree roll. A blown pressure bottle is a potentially powerful projectile if the valve is broken off—the reason safety caps were invented. You need to make sure that they get used.

Welders require specific vision screening exams depending upon what type of welding they will be doing. You should have the Jaeger eye chart on file, and the individual’s supervisor will tell you what exams they will need. You then record the results of that exam in the medical record as well as on the welding form maintained by the supervisor. Welders may also need respiratory and lead physicals depending on what type of soldering they are doing. The Industrial Hygienist can tell you which individuals will need these types of surveillance.

BATTERY SHOP

Recharging and repair of storage batteries is done aboard almost every ship. This process involves handling acids and electrical devices. The process gives off toxic and flammable gases, including hydrogen. Specifics to check are:

1. Fifteen-minute continuous eyewash flush station.
2. “No Smoking” signs posted.
3. CPR poster and rubber airway on the bulkhead.
4. Washdown shower permanently plumbed into the ship’s potable water supply.
5. Adequate face shields for everyone (don’t compromise in this shop).
6. A neutralizing station for an eye splash of corrosive material.
7. Protective garments, including goggles, face shields, and protective coveralls must always be worn in the area whether recharging is being done or not.
8. “No Smoking” and “Eye Hazard Area” should be stenciled in bright red letters on the door to the space.

MACHINE SHOP

Here, metal sheet work, drilling, pressing, and metal casting are performed. As in other industrial areas, eye protection (goggles), hearing protection, and steel-toed shoes should be minimum requirements. A quart-sized, squeezable eye wash bottle is also a minimum requirement. Continuous eye wash stations mounted on the bulkhead are preferable. CPR posters, rubber airways, etc. should be readily available. “Noise Hazardous Area” and “Eye Hazardous Area” should be stenciled on the door in red letters. There is little difference between the machine shop and other industrial areas. Just imagine, if you decide to give up medicine, you can always get a job as a plant manager looking for hazards and deaf machine operators.

GENERAL SURFACE MAINTENANCE

The decks, hull, bulkheads, and overheads are constantly being cleaned, primed, and painted. Hazards associated with these activities include noise (grinders and chippers), vibration, noxious fumes, and skin irritations (from paint and paint solvents). Eye hazards, from both paint and tools, are also present, as well as respiratory hazards.

One of the biggest abuses is the lack of respirator protection. Many times crew members are asked to work in a poorly ventilated, enclosed space, using paint and solvents that give off noxious, organic vapors, some of which are highly flammable. Approved respirators with organic vapor cartridges must be provided for this type of work. If not provided, the work should not be done. When in doubt as to what type of respirator or cartridge to use, check with the IH/Safety Officer to make sure that the individual is using the correct respirator/cartridge. Safety has all the references.

ELECTRICAL SAFETY

The Electrical Safety Officer (ESO) is in charge of making sure all electrical appliances, extension cords, and plugs are electrically safe. Your job is to make sure personnel are trained in CPR, first aid, and general electrical shock hazards. CPR posters and rubber airways are required in all spaces with electrical equipment and in any space where electrical shock can occur. The print shop on the tender can make metal placards if you give them a sample. The ESO will conduct the annual electrical safety training. You can further help your ESO by making sure that all electronic gear, both medical and personal, is safety checked when brought on board and when required. This means periodically checking that the electrical safety tag is on and current.

Radio frequency radiation (RFR) and microwave radiation hazards are also present with radar systems and high frequency gear. Make sure these hazardous areas are marked and clearly posted. High-energy radar waves can make pot roast out of sailors in short order.

CHT PUMP ROOMS

As mentioned previously, this area is a safety as well as a sanitation hazard. In addition to ensuring that all protective clothing and gear are available, you must be sure that self-contained breathing apparatus are available, if needed, and that checks for methane are made periodically. Of course, it is vitally important that “No Smoking” and “No Eating or Drinking” signs be placed in this area. All operating instructions for the CHT pumps should be clearly posted on the machinery.

A “gas-free” engineer (GFE) should be assigned to your ship. A GFE is in charge of making sure unventilated spaces are free of any noxious, toxic gases. Article 074-18-15 of the NAV SHIP TECHNICAL MANUAL (NSTM) specifies the responsibilities. This is not a publication you must memorize. If there is a gas-free problem with a space, the GFE is the person to ask. The CHENG makes sure conditions in the spaces comply with gas-free directions IAW the instruction and that any danger of poisoning, suffocation, or admission of flammable gases and dust vapors has been eliminated

before work proceeds. Several sailors die each year in our Navy because of this problem.

Note that, except in the case of an emergency, no one shall enter a closed or poorly ventilated space, tank, or bilge without obtaining permission from the Commanding Officer. Before anyone enters the space, the gas-free engineer must certify the safety of the space for the personnel and the intended work. Details on the safety precautions and mechanics of this procedure are in the aforementioned reference.

OXIDIZING MATERIALS

No oxidizing material may be stored in an area adjacent to any magazine or heat source where maximum temperatures exceed 100°F under normal operating conditions. Oxidizing materials also may not be stored in the same compartment with easily oxidized materials, such as fuels, oils, greases, paints, or cellulose products. Warning labels must appear on all containers and on secondary containers after transfer of oxidizing materials on board the ship. The label must indicate exactly what the material is and the amount contained. Those warning labels are NEVER to be removed or scratched out. Oxidizing materials should be accessible only to authorized personnel.

The primary oxidizing material stored on board is calcium hypochlorite, authorized for the purification of potable water, sewage treatment, and biological and chemical agent decontamination. Six ounce bottles are the only authorized bulk containers for potable water purification. Three and three quarter pound bottles are allowable for use in sewage waste treatment.

Calcium hypochlorite in and of itself is not combustible, but it reacts readily with flammable materials, sometimes violently, especially with organic fuels. Any contact with materials such as paint, oil, grease, detergent, acid, alkali, antifreeze, or other organic combustible material can produce large quantities of heat and/or fire, liberating chlorine gas.

A small, ready-to-use stock of 6 oz bottles is issued to Medical or Engineering (preferably Engineering), who should be in charge of its storage. It must be stored in a locked box mounted on a bulkhead. The main Engineering space is not authorized to have a calcium hypochlorite locker.

A first aid locker, NSN 2090-00-368-4792, is recommended for this purpose. These boxes must be ventilated using holes drilled into the bottom of the box to allow the release of any chlorine by-products. By regulation, no more than several days supply can be maintained in this ready locker at any one time. The ready-use stock for sewage disposal treatment can be stored in steel aluminum cabinets located on the bulkhead. These cabinets and racks must be equipped with shelving and retainer bars to secure the individual containers. The area must also be dry and not subject to condensation or water accumulation. No more than 48 six-ounce bottles or 36 three and three quarter pound bottles shall be stored in any individual locker or bin. The stern of the USS Kitty Hawk was almost blown off when all the calcium hypochlorite was stored together. Now 5 gallons is the maximum allowed in one place. In addition, never pour water into a hypochlorite container unless it is empty.

Issue shall be made only to personnel designated by the Medical or Engineering Officers. In most normal circumstances, the CHENG will designate a water engineer to break out calcium hypochlorite as needed for water and sewage.

When disposing of calcium hypochlorite due to a spill or an accidental contamination, clean up is accomplished with water. If drainage is available, the spill can be flushed to the drain or down into the bilges. There is no fire hazard from any dissolved calcium hypochlorite, even if it is flushed into the engine room bilge. Sweepings of dried CH should be dumped immediately into the water, and the broom or brush used to sweep immediately rinsed with water. Never allow dumping of dry calcium hypochlorite into trash cans—a tremendous fire hazard!

If the contents of the storage locker become contaminated with any foreign material, empty them into a bucket of water. The water mixture may then be discharged through sanitary drains or dumped overboard. Calcium hypochlorite is not an environmental pollutant in quantities of a few pounds. For details, reference NAVAL SHIP'S TECHNICAL MANUAL, Chapter 670.

SAFETY IN MEDICAL SPACES

Your own department's safety should be your primary area of concern. The following is a general list of what is deemed "safe" by the Safety Center and the TYCOMS:

1. A well-maintained poison antidote locker must be located in the main Sick Bay. This locker should contain most major antidotes for chemicals and toxic substances on board. A complete list of requirements may be found in the pertinent SURFLANT/PAC instructions.
2. Portable medical kits must be available and currently stocked in each repair party locker.
3. Sealed and properly labeled first aid boxes (with current inventories) should be distributed throughout the ship. An ongoing problem is keeping up with the constant pilferage. You may need to have your corpsmen conduct monthly inspections to identify which boxes have been broken into so that missing items can be replaced. They can also look for the injured who are using the supplies!
4. The material condition of all stretchers, including safety straps, should be in good repair. Lines on the litters should be long enough to reach down the entire length of any escape trunk. This may mean a line long enough to reach 7th or 8th deck levels if on a tender.
5. All electrical shock hazard areas need rubber airways and CPR posters, including the Medical spaces.
6. All battle dressing and decontamination stations must be kept stocked with all required materials. This is another area that will frustrate you, because they are constantly vandalized. The more secure you make them, the less your problems will be. However, this won't prevent the Engineers from removing your sink drainpipe or light fixtures when they need spare parts. It seems BDS areas can be considered "salvage yards" by Engineers; they will take whatever they need in a pinch. And don't think that because it's nailed down it will stay; Engineers can remove anything. So it pays in many ways to remain on good terms with the Engineers.
7. All drugs, biologicals, and pharmaceuticals must be up-to-date (not expired). They must be kept in the storage areas at the proper temperature. Put an alarm

on the biologicals refrigerator to indicate when the temperature is out of the safety zone.

8. All injury reports should be handled in accordance with OPNAVINST 5102.1. Any injury that occurs on board must be logged in both the Medical Department journal and the Deck Log. Injury reports must be forwarded through the chain of command via the XO and CO to the Safety Center (if it's a reportable injury). Safety does this.

ACCIDENT AND INJURY REPORTS

The best and easiest way to accomplish these is to use the Accident/Injury Report form shown in the SORM. Medical fills out the front portion, and Safety has the individual's division investigate the accident and fill out the back. If it is a reportable injury, then Safety fills out additional paperwork and sends that to the Safety Center. As previously mentioned, any injury that you treat, whether it is occupational or non-occupational, must be reported (even paper cuts if they seek medical treatment).

All pertinent information is recorded in the Medical Department daily journal (it's a good idea to get rubber stamps). Have the corpsmen fill out one of the blank A & I reports as they treat the patient, then type these on carbonless copy paper or on computer blanks. The original goes to the CO via the XO, one copy goes to the division officer (for a heads up on the investigation), one goes to Safety, one to your files, and one to the OOD for inclusion in the Deck Log. This last one is often overlooked, but the Deck Log must reflect every injury that occurs on board, so that there is a legal record of the injury in case the individual applies for disability compensation later in life.

This may seem like a lot of paperwork, but it serves several purposes. One, it lets Safety know what types of injuries are occurring and where. Two, it allows them to develop a better and more effective safety program geared to the ship's needs. Three, Safety and Medical can also get early warnings about potentially serious safety hazards and take steps to correct them. Four, division officers get to see what kind of injuries their people are getting and can take steps at the source to try to prevent them, perhaps by better training or supervision or enforcing use of personal protective gear. In addition, if a person has an automobile accident, and you are the first military medical treatment that they have visited, fill out a JAGMAN form (Legal has them) at the time of initial treatment and forward that to Safety. There will be a JAGMAN investigation somewhere down the road and chances are you will not remember the exact specifics of the individual's treatment months after the fact. At times you'll have trouble remembering what you did that morning.

There is a host of other specific safety pointers in SURFLANT/PAC instructions. Know where to find the information you need. Most of the instructions regard fuels, lube oils, cleaning fluids, and the like. Also mentioned are such safety items as worn ladder treads, rubber mats in showers and electrical areas, non-skid surfaces on decks, etc. A good guide is the Safety Survey Check-off Sheet put out by the Naval Safety Center.

Chapter 17, SANITATION PROGRAMS

GARBAGE AND REFUSE

A ship is a floating community capable of complete, independent subsistence. Power, water, food, and almost all services are offered on board. From these services flow an inevitable, incomprehensible, overwhelming amount of trash and garbage. Allowed to accumulate over 24 hours, the trash and refuse can bury everyone on board!

Most ships have effective garbage and refuse handling facilities. Garbage grinders deal with organic matter and trash compactors help reduce the bulk to better utilize the designated trash and garbage storage areas while underway. While pierside, this is no problem unless the trash truckers are on strike. Underway, it is a different matter entirely. Rules and regulations governing disposal of refuse, designed to protect the environment, must be followed scrupulously to avoid big-time trouble.

Solid and oily waste, trash, and refuse are not to be discharged within 50 miles of any shoreline or within the navigable waters of the United States. All ships equipped with incinerators and trash compactors are tasked to use that equipment as much as possible. All trash and refuse released at sea is to be packaged with negative buoyancy (this means it will sink). Ships equipped with incinerators must conform to local air pollution regulations. If the use of incinerators is prohibited, trash must be transferred for disposal ashore. Ground garbage can be discharged into the CHT system for transfer to shore facilities or for overboard discharge if the ship is outside the prohibited zone (greater than 3 nautical miles).

Between dumpings, garbage and trash may be kept on the fantail (or any other place that strikes the fancy of the XO). The deck area around the garbage containers is to be kept clean at all times (you will find that this is more fiction than fact). All garbage cans are to be scrubbed with hot soap and water and steamed after using. They must have lids that are attached to the containers at all times. Attaching the lids prevents boatswains mates from using the trash can lids as Frisbees.

Specific rules covering trash continue to change frequently as environmental and political concerns change. Two specific areas are plastics and biomedical waste. Many ships have set up recycling programs for aluminum, metal, and paper for MWR money. So you may notice multiple trashcans in spaces designated for specific items. Plastics are definitely one of those items, while underway. Plastics can no longer be dumped at sea but must be retained on station until they can be disposed of ashore. There are some loopholes. Food contaminated plastics, since they are a potential health hazard, can be disposed of after three days at sea once they are weighted down. If there is too much non-food contaminated plastics, or you deem it a health hazard, and you have been at sea more than 20 days and won't hit port for another three, the CO can authorize the ship to dump weighted plastics at sea. This must be logged in the Deck Log with date, time, and location. As you can see, it is easier to simply keep plastics on station until you arrive in port.

BIOMEDICAL WASTE

Biomedical waste is an issue that has recently gotten much unpleasant press, due to its having washed up on public beaches. Most of you are familiar with what biomedical waste is. Every hospital has red bags and sharps containers for these and you learn what goes in them as interns and medical students. Most of your corpsmen should also be aware of what goes in them too, but don't assume that. Check the TYCOM instructions for specific details for your area (NAVMEDCOMINST 6280.1, 04 Apr 89, covers shore facilities) and brief all your personnel upon arrival and periodically (semiannually or when you notice a problem).

As with other trash, plastics, aluminum, and biomedical waste must be sorted at the source to have an effective program. At times it will seem like you have labeled trash cans every where in the medical spaces, but if they aren't convenient to where people are, they won't get used. Obvious places to put biomedical trashcans include the treatment rooms, OR, your exam room, the ward, and the lab. Sharps containers also go in the treatment room, pharmacy, and lab. How much biomedical waste you generate will determine the size of the containers. Your predecessor should be able to brief you on this. All sizes of items are supposed to be standard stock now and easier to order.

Once you have segregated the biomedical waste, it must be autoclaved and labeled with the date and time that was done. If you have two sterilizers, designate one for biomedical waste and have the duty crew do this after hours—the stuff smells when it's cooking. You must designate an area or storeroom where the autoclaved material is stored until you dispose of it properly ashore. Even though the material is no longer infectious, you must label the area where it is stored, as well as areas where it is generated, with one of the universal orange biohazard symbols. The print shop on a tender can make these for you if you give them a color pattern.

Each base and each community handles the disposal of biomedical waste differently. There are no federal standards, but you still have to meet federal, state, and local regulations. Check with your local branch clinic or group Medical Officer to see how biomedical waste is disposed of in your area. The same goes for overseas ports. In US ports overseas, it is not too difficult to dispose of biomedical waste ashore, but in non-US ports, you should plan to keep it until you reach a US port; it is difficult and often too expensive to arrange disposal. The importance of the plastics at sea and the biomedical waste program cannot be overemphasized. COs and XOs have been reprimanded for dumping biomedical waste at sea. If that happens, plan to be joining your XO and CO in hack.

HAZARDOUS WASTE

The hazardous materials (HM) program is not one that you will manage (Safety does), but you will be involved with it from the treatment standpoint and the generator/user standpoint. (See OPNAVINST 5100.19C, Chapter B-3.) All the x-ray and lab chemicals are hazardous and require special handling, storage, and disposal. Medical generally has a flammable locker assigned to it for the storage of flammables, e.g., pesticides, acids, etc. You must keep track of what is in the flammable locker, that materials are stored correctly, and that they are disposed of properly. This is done through the

hazardous materials coordinator, who will fill out all the proper forms and take the materials off your hands. Make sure you get a receipt for the material you dispose of for your files in case there are any questions later. The EPA is taking a very keen interest in how the Navy disposes of its hazardous materials/hazardous waste (HM/HW). Therefore, the commands will too. If you have any doubt whether something is HW, ask the HM coordinator before you dump it.

To help you treat personnel who have been exposed to hazardous materials, there is the Navy's Hazardous Material Information System (HMIS). This is a microfiche deck that contains emergency treatment and handling information on most hazardous materials procured through the Navy. Medical should be on the mailing list; it comes out quarterly. If you aren't, see the SUPPO, who can get you on the mailing list. For hazardous materials procured open purchase (a practice discouraged), there are Material Safety Data Sheets (MSDS), which also contain emergency treatment and handling information. In addition, each work center supervisor is to use the HMIS or the MSDS to train personnel to use proper safety precautions and be aware of particular hazards associated with the chemicals in that work area.

While you are not responsible for any HM/HW other than your own, try to keep track of how other departments handle their HM/HW from a safety standpoint. During a zone inspection or a workplace walk-through, just ask to see the flammable storage locker and look in drawers and cupboards to see what is present (you will be amazed). Make sure that the print shop, the photo lab, and other shops are disposing of HW properly and not pouring it down the sink. Help the Safety Officer whenever possible.

Chapter 18, DEPLOYMENT

Like it or not, ships were built to go to sea, not sit at a pier (even tenders deploy routinely). A ship's schedule is planned around the mission of the ship on each type of deployment or operation. Each operation and deployment has its own specific operational and medical threats, and your job is to plan accordingly by anticipating problems. You will never see all the problems, but some are pretty obvious; for example, cold weather injuries are a very real threat on operations in the North Atlantic in January. What follows are some of the tools and resources you can use to plan the medical support for an operation or deployment.

REFRESHER TRAINING (REFTRA)

This is generally a two-week exercise to prepare a ship for deployment. It is conducted within four months of deployment. It is a very intensive training environment that trains and tests the entire crew on all aspects of naval operations. All seamanship and navigational skills are tested, from routine leaving and entering port, to anchoring, mooring, navigating swept minefields, underway replenishment, flight operations, man overboard and other emergency response drills, and well deck and other amphibious exercises. Gunnery and other warfare training and exercises are completed. Damage control is heavily stressed with all conceivable scenarios conducted. Included within this is a test of the crew's first aid ability, how well the stretcher bearers respond, and whether Medical can effectively treat casualties under any adverse conditions. There will always be at least one mass casualty at the end (there may be two or more).

REFTRA is like being on call every night as an intern and knowing that you will be swamped with emergencies. You learn to fit the daily routine (yes, you still have to do the routine things like Sick Call) in between the emergencies and count the days until the end. Once you have survived REFTRA, you can use the lessons learned to modify your training plans and other deployment preparations as needed.

PREDEPLOYMENT SCHEDULE

To assist Medical Officers in planning for a deployment, there are predeployment check-off lists (see Appendix D). Ideally, you will know more than six months ahead of time when you are deploying, so the time schedule is accurate, but last minute deployments still occur and you just have to do your best—another reason for keeping all programs current! The predeployment check-off guide is not carved in stone but does give good time sequences. You should make sure that all routine and predeployment inspections are completed at least one month prior to the departure date. This allows you and the department to concentrate on last minute supply headaches, courses, training, and personal business.

This last item is crucial. You must ensure that you and your people have all personal affairs straightened up prior to departure. This includes having a current will, a power of attorney, setting up allotments and direct deposit of paychecks, putting cars and belongings in storage if necessary, making sure that families are ready to handle routine matters, and saying goodbye to loved ones. If you need to take leave to do these things,

do so. You need to have your personal life in order so you can concentrate on the task at hand.

In the month prior to deployment, you should offer a brief to all active duty members, families, and “significant others” to provide them with some realistic expectations for their adaptation. Your local Family Service Center can provide you with this information. A postdeployment brief is also recommended. There is predictably some role reversal and shifting of dependencies during these evolutions, and your crew will adapt much better (with better mission effectiveness) if they know what to expect.

Note: These briefs are routinely done and scheduled by ships; you just need to see where you fit in.

Additionally, before embarking on a cruise, make contingency plans based on your destination and mission. If debarking a task force of Marines to the Philippines for maneuvers, don't be caught without malaria prophylaxis. It happened once, with high casualty rates and shortened Medical Officer careers. Your department, or at least your Operations officer, will have a copy of the lessons learned from ships that have been to your deployment destinations before. Get them and read them thoroughly. Take the recommendations to heart and plan accordingly. If that ship's Medical Department was worth its salt, the lessons they learned will be very helpful. Keep this in mind when you write yours. Put in them **ANYTHING** you wish you had known or that you want to stress to anyone going there again. Future Medical Officers will be eternally grateful to you.

For certain areas of the world, some basic principles apply. When deployed to the Indian Ocean area and other desert climates, expect to need many large amounts of antifungals (all types), non-steroidals (you will always have sports injuries), cold medication and antibiotics for the respiratory infections (the dust creates the problem), sunscreen, anti-diarrheal preparations (most diarrhea overseas is bacterial and needs antibiotics—your local NEPMU can tell you the best regimens to use), and IV solutions for rehydration from diarrhea or heat casualties.

EMBARKED MEDICAL PERSONNEL

Included within contingency planning is whether or not you will have embarked medical personnel. This can be as a surgical team or with a Marine unit or wing. As Medical Officer of the ship, you are responsible for the care of all embarked personnel, and, technically, any embarked medical personnel fall under your jurisdiction. This can be difficult if the embarked surgeon is very senior to you. It may require great diplomacy on your part to not antagonize anyone. Generally, embarked medical personnel are happy to help out, and for the Marine units, you should give their Medical Officer an office or space to hold Sick Call on the Marines and assist you with Sick Call for the crew. Again, tread lightly in this area, but don't be browbeaten by a senior medical person, since you will be held accountable for anything that happens to a patient. Get your CO to help clarify the chain of command.

MEDICAL INTELLIGENCE

There are multiple resources available to help plan contingency operations. The Navy Preventive Medicine Units (#2 in Norfolk, #5 in San Diego, #6 in Pearl Harbor, #7 in Naples), Naval Medical Research Units (Cairo, Jakarta, Peru) where appropriate, and the Armed Forces Medical Intelligence Center at Fort Detrick, Maryland, can all give you good information. (See Appendix E for addresses and message PLADs for sources of medical intelligence.) Check with your XO prior to deployment and obtain as much information as you can get (without breaking security) regarding port calls, length of stay at sea, and other variables that could impact the crew's medical and psychological problems. Absolutely nothing is more frustrating to a physician than being at the end of a supply chain and unable to obtain the rudiments needed for the practice of medicine.

Prior to a deployment, the local Preventive Medicine Unit can give you computer files or hard copy of DISRAPs (disease risk assessment profiles). This will give you the current medical intelligence for any area of the world. Look at any area you may be going to prior to deployment so that you can stock your supplies accordingly. Since the DISRAPs are on computer discs, you can then read them during the deployment, prior to each port visit.

The NEPMUs also give detailed predeployment briefs for you and are available to train or retrain your lab tech in how to do malaria smears. If your ship is homeported in an area with an NEPMU, go to one of the predeployment briefs they have. If your ship is homeported elsewhere and your command has the travel money (a very slim possibility), also go to one of the predeployment briefs.

Your TYCOM also has predeployment packets that contain phone numbers for US hospitals and clinics on overseas bases, as well as maps and other emergency phone numbers. Always keep these handy in case the medical person meeting your ship overseas doesn't bring them. The TYCOM may also give you some emergency information and numbers for overseas ports commonly visited by US ships.

Now that you have all your instructions, everyone is trained, and all inspections are completed, you are ready for deployment. Go out and man the rail when the ship departs your home port, wave to loved ones on the pier, and get ready for an experience like none you've had before.

"Fair winds and a following sea..."

Appendix A, PHONETIC ALPHABET

A – Alpha

J – Juliet

S – Sierra

B – Bravo

K – Kilo

T – Tango

C – Charlie

L – Lima

U – Uniform

D – Delta

M – Mike

V – Victor

E – Echo

N – November

W – Whiskey

F – Foxtrot

O – Oscar

X – X-ray

G – Gulf

P – Papa

Y – Yankee

H – Hotel

Q – Quebec

Z – Zulu

I – India

R – Romeo

Appendix B, SHIP AND BOAT TYPES & RELATED ACRONYMS

AD.....	Destroyer Tender	LCV	Landing Craft, Vehicle
ADG.....	DeGaussing Ship	LCVP	Landing Craft, Vehicle and Personnel
AE.....	Ammunition Ship	LGB	Large Gray Boat
AF	Store Ship	LHA	Amphibious Assault Ship, General Purpose
AFDB.....	Large Auxiliary Floating Drydock	LHD	Amphibious Assault Ship, Multi-Purpose
AH.....	Hospital Ship	LKA.....	Amphibious Cargo Ship
AFS.....	Combat Stores Ship	LPD	Amphibious Transport Dock
AG	Miscellaneous Ship	LPH	Amphibious Assault Ship, Helicopter
AGF	Miscellaneous Flagship	LSD	Landing Ship, Dock
AGI	Intelligence Collecting Ship	MCM.....	Mine Countermeasures Ship
AGMR.....	Major Comms Relay Ship	MERSHIP ...	Merchant Ship
AKR	Vehicle Cargo Ship	MSO	Minesweeper, Ocean (Non-Magnetic)
AMTRAC	Amphibious Tractor	PBR	Patrol Boat, River
ANL	Net Laying Ship	PCF	Patrol Craft, Fast
AO	Oiler	PCH	Patrol Craft, Hydrofoil
AOE	Fast Combat Support Ship	PHM.....	Patrol Combatant Missile Hydrofoil
AOR.....	Replenishment Oiler	QFB	Quiet Fast Boat
APB	Self-Propelled Barracks Ship	RAC	River Assault Craft
AR.....	Repair Ship	RRC.....	Rigid Raiding Craft (USMC)
ARC	Cable Repairing Ship	RUC.....	River Utility Craft
ARD	Auxiliary Repair Drydock	SASS	Special Aircraft Service Ship
ARL	Small Repair Ship	SSBN.....	Nuclear-Powered Fleet Ballistic Missile Submarine
ARS	Salvage Ship	SSN	Nuclear-Powered Attack Submarine
ARSD.....	Salvage Lifting Ship	STAB	Strike Assault Boat
AS.....	Submarine Tender	SWAL	Shallow Water Attack Craft, light
ASPB.....	Assault Support Patrol Boat	SWAM	Shallow Water Attack Craft, medium
ASR	Submarine Rescue Ship	TAGOS	Ocean Surveillance Ship
ATA.....	Auxiliary Ocean Tug	YAG	miscellaneous auxiliary (self-propelled)
ATF	Fleet Ocean Tug	YF	covered lighter (self-propelled)
ATS.....	Salvage and Rescue Ship	YFB.....	ferryboat of launch (self-propelled)
AVM.....	Guided Missile Ship	YFU	harbor utility craft (self-propelled)
BB.....	Battleship	YG	garbage lighter (self-propelled)
CECS.....	Casualty Evacuation and Control Ship	YGN.....	garbage lighter (non-self-propelled)
CG	Guided Missile Cruiser	YLLC	salvage lift craft, light (self-propelled)
CGC.....	Coast Guard Cutter	YM	dredge (self-propelled)
CGN.....	Nuclear-Powered Guided Missile Cruiser	YO	fuel oil barge (self-propelled)
CV.....	Multi-Purpose Aircraft Carrier	YOG.....	gasoline barge (self-propelled)
CVN	Nuclear-Powered Multi-Purpose Aircraft Carrier	YOGN	gasoline barge (non-self-propelled)
DD	Destroyer	YP.....	patrol craft (self-propelled)
DDG.....	Guided Missile Destroyer	YTB.....	large harbor tug (self-propelled)
DSRV.....	Deep Submergence Rescue Vehicle	YTL	small harbor tug (self-propelled)
DSV	Deep Submergence Vehicle	YTM	medium harbor tug (self-propelled)
FF	Frigate	YW.....	water barge (self-propelled)
FFG	Guided Missile Frigate	ZAP.....	zero antiaircraft potential
FLG.....	Flagship	ZD.....	zero defects
FPB.....	Fast Patrol Boat	ZFW	zero fuel weight
GFSS.....	Gunfire Support Ship	ZIM	zonal interdiction missile
IBS.....	Inflatable Boat		
LCAC.....	Landing Craft, Air Cushion		
LCC	Amphibious Command Ship		
LCM.....	Landing Craft, Mechanized		
LCPL	Landing Craft, Personnel, Large		
LCS	Landing Craft, Assault		
LCU	Landing Craft, Utility		

Appendix C, COMMON ACRONYMS

3M	Maintenance and Material Management (System)	C4I	Command, Control, Communication, Computer & Intelligence
AAA	Arrival and Assembly Area	CAAC	Counseling and Assistance Center
AABB	American Association of Blood Banks	CACO	Casualty Assistance Calls Officer
AAW	Anti-Air Warfare Operations	CART	Command Assessment of Readiness & Training
ACDUTRA	Active Duty for Training	CASH	Combat Army Surgical Hospital
ACLS	Advanced Cardiac Life Support	CASREP	Casualty Report
ADAL	Authorized Dental Allowance List	CATF	Commander, Amphibious Task Force
AECC	Aeromedical Evacuation Coordination Center	CBIRT	Chemical Biological Incident Response Team
AELT	Aeromedical Evacuation Liaison Team	CBR	Chemical, Biological, and Radiological
AJBPO	Area Joint Blood Program Office	CCOL	Compartment Check-Off List
AMMAL	Authorized Minimum Medical Allowance List	CD	Considered Disqualifying
AMSP	Asbestos Medical Surveillance Program	CDO	Command Duty Officer
AOA	Amphibious Objective Area	CDS	Container Delivery System
AOR	Area of Responsibility	CECO	Combat Evacuation Control Officer
ARD	Alcohol Rehabilitation Drydock	CECS	Casualty Evacuation Control Ship
ASBP	Armed Services Blood Program	CHT	Collecting and Holding Tank
ASF	Aeromedical Staging Facility	CIC	Combat Information Center
ASMRO	Armed Services Medical Regulating Office	CINC	Commander in Chief
ASW	Anti-Submarine Warfare	CME	Continuing Medical Education
ASWBPL	Armed Services Whole Blood Processing Laboratory	CMS	Communications Security Material System
ATH	Air Transportable Hospital	CNO	Chief of Naval Operations
ATLS	Advanced Trauma Life Support	COC	Combat Operations Center
AVMO	Aviation Medical Officer	COMPTUEX	Composite Training Unit Exercises
BAS	Battalion Aid Station	COMSEC	Communications Security
BDA	Battle Damage Assessment	CONREP	Connected Replenishment
BDS	Battle Dressing Station	CONUS	Continental United States
BECCE	Basic Engineering Casualty Control Exercise	CORC	Care of Returning Casualties
BES	Beach Evacuation Station	COSAL	Consolidated Ship/Station Allowance List
BLDRPT	Blood Report	CPR	Cardiopulmonary Resuscitation
BLS	Beach Landing Site; Basic Life Support	CRTF	Casualty Receiving and Treatment Facility
BMET	Biomedical Equipment Technician	CRTS	Casualty Receiving and Treatment Ship
BSU	Blood Supply Unit	CSAR	Combat Search and Rescue
BUMED	Bureau of Medicine	CSMP	Current Ship's Maintenance Project
		CSRT	Combat Systems Readiness Test
		DAPA	Drug & Alcohol Program Advisor
		DAR	Disease Alert Report
		DCA	Damage Control Assistant
		DCC	Damage Control Central
		DCPO	Damage Control Petty Officer
		DD1141	Record of Occupational Exposure to Ionizing Radiation
		DDPR	Duplicate Dental Panoramic Radiographs
		DECON	Decontamination
		DESRON	Destroyer Squadron

DEVCC	Disease Vector and Ecology Control Center	EPTE	Existing Prior to Entry
DEW	Directed Energy Weapon (usually laser)	ESO	Education Services Officer
DFAS	Defense Finance & Accounting Service	FAB	First Aid Box
DHP	Defense Health Program	FDL	Forward Deployable Laboratory
DIH	Died in Hospital	FEP	Final Evaluation Period
DISRAPs	Disease Risk Assessment Profile	FFP	Fresh Frozen Plasma
DLAM	Defense Logistics Agency Manual	FH	Fleet Hospital
DMLSS	Defense Medical Logistics Support System	FHOTC	Fleet Hospital Operations and Training Center
DMRIS	Defense Medical Regulating Information System	FISC	Fleet and Industrial Supply Center
DMSB	Defense Medical Standardization Board	FMF	Fleet Marine Force
DMSSC	Defense Medical System Support Center	FMFM	Fleet Marine Force Manual
DNBI	Disease and Non-Battle Injury	FOD	Foreign Object Damage
DNSI	Defense Nuclear Safety Inspection	FOS	Full Operating Status
DOG	Division Officer's Guide	FP	Frozen Platelets; or Family Practice
DOS	Day of Supply; Department of State	FRBC	Frozen Red Blood Cells
DOW	Died of Wounds	FSA	Food Service Attendant
DOWW	Disease Occurrence Worldwide	FST	Fleet Surgical Team
DTF	Dental Treatment Facility	FXP	Fleet Exercise Publication
DVECC	Disease Vector Ecology and Control Center	GMT	General Military Training
ECCTT	Engineering Casualty Control Training Team	GPMRC	Global Patient Movement Requirements Center
EDF	Enlisted Dining Facility	GQ	General Quarters
EDVR	Enlisted Distribution/Verification Report	HDC	Helicopter Direction Center
EEBD	Emergency Escape Breathing Device	HFHL	High Frequency Hearing Loss
EH/PM	Environmental Health/Preventive Medicine	HHS	Health Service Support
EHRA	Environmental Health Risk Assessments	HM	Hospital Corpsman
EHS	Environmental Health Survey	HM/HW	Hazardous Material/Hazardous Waste
EMAR	Enlisted Manning Advisory Report	HMIS	Hazardous Material Information System
EMB	Embarkation	HNS	Host-Nation Support
EMIR	Enlisted Manning Inquiry Report	HR	Hostage Rescue
EMT	Emergency Medical Technician	HSETC	Health Sciences Education and Training Command
EOB	Estimate of Budget	HUMOPS	Humanitarian Operations
EOC	Emergency Operation Center	IAW	In Accordance With
EPMU	Environment Preventive Medicine Unit	ICD-9	International Classification of Diseases (Rev. 9)
		ICF	Individual Credentialing File
		ID	Identification
		IDC	Independent Duty Hospital Corpsman
		IDRA	Infectious Disease Risk Assessments
		IDTC	Inter-Deployment Training Cycle
		IG	Inspector General
		IH	Industrial Hygienist
		IHS	Industrial Hygiene Survey
		IL	Identification List
		IMA	Individual Mobilization Augmentee
		IMSP	Integrated Medical Support Program
		INH	Isoniazid
		INSURV	Board of Inspection and Survey
		IRFT	Interim Refresher Training
		IRT	In Response To
		ISG	Immune Serum Globulin

ISIC	immediate superior in command		Assistant
ISSA	Inter-Service Support Agreement	MRA	Medical Readiness [Assist or Assessment]
ITT	Interrogator and Translator Team; or Integrated Training Team	MRCC	Medical Regulating Control Center
		MRCO	Medical Regulating Control Officer
		MRE	Medical Readiness Evaluation; or Meals Ready to Eat
		MRS	Medical Regulating System
JBPO	Joint Blood Program Office	MSC	Military Sealift Command; or Major Subordinate Command; or Medical Service Corps
JMBO	Joint Military Blood Office	MSD	Marine Sanitation Device
JMRO	Joint Medical Regulating Office	MSOC	Medical Support Operations Center
JOINT	two or more US Military Services working together	MTF	Medical Treatment Facility
		MTT	Medical [or Mobile] Training Team
		MWR	Morale, Welfare, and Recreation
KIA	Killed In Action		
		NAMI	Naval Aerospace Medicine Institute
LAN	Local Area Network	NAMRL	Naval Aerospace Medical Research Laboratory
LFHL	Low Frequency Hearing Loss	NAVHOSP	Naval Hospital
LIC	Low Intensity Conflict	NAV MED 6120/1	Officer Physical Examination Questionnaire
LOE	Light-Off Examination	NAVOSH	Naval Occupational Safety and Health Program
LOG REQ	Logistics Request	NBC	Nuclear, Biological, and Chemical
LOI	Letter of Instruction	NCCPA	National Commission on Certification of PAs
LRTP	Long Range Training Plan	NCD	Not Considered Disqualifying
LVUPK	Leave and Upkeep	NCRP	National Council on Radiation Protection
		NDMS	National Disaster Medical System
MAA	Master At Arms	NEC	Navy Enlisted Classification
MAD	Medical Anchor Desk	NECDS	Navy Emergency Container Delivery System
MANMED	Manual of the Medical Department	NEHC	Navy Environmental Health Center
MAO	Medical Administrative Officer	NEO	Non-Combatant Evacuation Operation
MAP	Medical Augmentation Program	NEPMU	Navy Environmental and Preventive Medicine Unit
MASF	Mobile Aeromedical Staging Facility	NGFS	Naval Gunfire Support
MATINSP	Material Inspection	NGO	Non-Governmental Organization
MDA	Minimum Detectable Activity	NHRC	Naval Health Research Center
MDL	Management Data List	NIIN	National Item Identification Number
MDR	Medical Department Representative	NIOSH	National Institute for Occupational Safety and Health
MEDCAPS	Medical Capabilities Study	NIS	Naval Investigative Service
MEDEVAC	Medical Evacuation	NMDMB	Navy Medical and Dental Material Bulletin
MEDIC	Medical Environmental Disease Intelligence and Countermeasures	NOBC	Naval Officers Billet Code
MEDREGNET	Medical Regulation Net (radio)	NOFORN	Not Releasable to Foreign Nationals
MEPES	Medical Planning and Execution System	NOMI	Naval Operational Medicine Institute
MMART	Mobile Medical Augmentation Readiness Team	NRC	Nuclear Regulatory Commission
MMD	Manual of the Medical Department	NRF	Naval Reserve Force
MO	Medical Officer	NSF	Navy Stock Fund
MOSR	Medical Operations Support Requirement	NSN	National Stock Number
MPA	Manpower Authorization; or Main Propulsion	NSTM	Naval Ship's Technical Manual
		NTP	Naval Technical Publication
		NUMI	Naval Undersea Medicine Institute
		NWAI	Nuclear Weapons Acceptance

	Inspection	POL	Petroleum, Oil, and Lubricants
NWP	Naval Warfare Publications	POM	Program Objective Memorandum; or Pre-Overseas Movement (as in POM period)
OBA	Oxygen Breathing Apparatus	POMI	Plans, Operations, and Medical Intelligence Officer
OCONUS	Outside Continental United States	POT&I	Pre-Overhaul Test & Inspection
OIC	Officer-In-Charge	POTS	Plain "Old" Telephone System
OOD	Officer of the Deck	PPE	Personal Protective Equipment
OOTW	Operations Other Than War	PQS	Personnel Qualification Standard
OPLAN	Operational Plan	PRIMUS	Physician Reservists in Medical Universities and Schools
OPN	Other Procurement Navy	PRP	Personnel Reliability Program
OPORD	Operations Order	QA	Quality Assurance
OPPE	Operational Propulsion Plant Examination	QC	Quality Control
OPSEC	Operations Security	QOB	Quantity on Board
OPTAR	Operational Target (funding)	RADCON	Radiological Controls
ORE	Operational Readiness Evaluation	RAMP	Reserve Allied Medical Program
ORSE	Operational Reactor Safety Examination	RAS	Regimental Aid Station; or Replenishment at Sea (see UNREP)
OSI	Operational Space Items	RBC	Red Blood Cells
OTH	Over-the-Horizon	RCPE	Radiological Controls Practice Examination
OVHL	Overhaul	REFTRA	Refresher Training
PA	Physician's Assistant	RHO	Radiation Health Officer
PACOM	Pacific Command	ROC	Required Operational Capability
PAHO	Pan American Health Organization	ROH (or ROV)	Routine Overhaul
PAR	Population at Risk	ROPU	Reverse Osmosis Processing Unit
PB4T/PBFT	Planning Board for Training	RTD	Return to Duty
PCRTS	Primary Casualty Receiving and Treatment Ship	RUPPERT	Reserve Unit Personnel & Performance Report
PDTP	Predeployment Treatment Program (dental)	SAC	Strategic Air Command; or Supply Account Code
PEB	Propulsion Examining Board	SAMS	Ship's Automated Medical System
PECK	Patient Evacuation Contingency Kit	SAP	Security Assistance Program
PHEL	Physiological Heat Exposure Limits	SAR	Search And Rescue; Sea-Air Rescue
PLAD	Plain Language Address Directory	SART	Sexual Assault Response Team
PMEL	Precision Measuring Equipment Laboratory	SAVI	Sexual Assault Victim Intervention
PMI	Patient Movement Item	SCM	Ship's Cargo Manifest
PML	Portable Medical Locker	SCRTS	Secondary Casualty Receiving and Treatment Ship
PMS	Preventive Maintenance System; Planned Maintenance System	SEAL	Sea-Air-Land
PMT	Preventive Medicine Technician	SERE	Survival, Evasion, Resistance, Escape
POA&M	Plan of Action & Milestones	SF	Standard Form
POD	Plan of the Day	SF 513	Consultation Sheet
POE	Projected Operational Environment	SF 600	Chronological Record of Medical Care
		SF 88	Report of Medical Examination
		SF 93	Report of Medical History
		SG	Surgeon General
		SHML	Ship's Hazardous Material List
		SIMLM	Single Item Medical Logistic Manager
		SIQ	Sick in Quarters
		SMD	Ship's Manning Document
		SMDO	Senior Medical Department Officer

SMDR Senior Medical Department Representative
SMI Supply Management Inspection
SMO Squadron Medical Officer; Senior Medical Officer
SOAP Subjective, Objective, Assessment, Plan
SOP Standard Operating Procedure
SOPA Senior Officer Present Afloat
SORM Standard Organization and Regulations Manual of the US Navy (OPNAV 3120.32 series)
SRA Selected Restricted Availability
STEP Shipboard Training Enhancement Program
STP Shock Trauma Platoon
SURGCO Surgical Company
SWMI Surface Warfare Medicine Institute

T-AH Hospital Ship
TAML Theater Area (or Army) Medical Lab
TAV Technical Assist Visit
TBD To Be Determined
TE Table of Equipment
TFBPO Task Force Blood Program Officer
TFMRS Task Force Medical Regulating System
THCSRR Total Health Care System Readiness Requirement
TPMRC Theater Patient Movement Requirements Center
TQL Total Quality Leadership
TRAC2ES TRANSCOM's Regulating Command and Control Evacuation System
TRANSCOM Transportation Command
TRAP Tactical Recovery of Aircraft and Personnel
TRE Training Readiness Evaluation
TYCOM Type Commander

UA Unauthorized Absence
UCMJ Uniform Code of Military Justice
UDT Underwater Demolition Team
UIC Unit Identification Code
UNREP Underway Replenishment
UPLR Unplanned Loss Report
USP United States Pharmacopoeia

V/STOL Vertical/Short Take-Off and Landing
VERTREP Vertical Replenishment

WB Whole Blood
WBGT Wet Bulb Globe Thermometer (or Temperature)
WHO World Health Organization
WIA Wounded in Action
WMD Weapons of Mass Destruction
WQSD Watch, Quarter, and Station Bill

Appendix D, Pre-Deployment Checklist

Plan of Action and Milestones (POA&M) for Predeployment Preparation of Medical Departments, from COMNAVSURFPACINST 6000.1D.

- D-180** Review current list of required books, publications, and instructions. Order as necessary. Follow up at D-90.
- D-180** Review AMMAL and TYCOM requirements for Type I shelf life items. Prepare a plan to have 100% of the requirements aboard with an expiration date no earlier than the end of the deployment. Follow up at D-90, D-60, and D-30.
- D-180** For designated Casualty Receiving Ships, ensure that one litter is aboard for each rated casualty carrying capacity. Follow up at D-90, D-60, and D-30.
- D-180** Request current spare parts listing from NAVMEDLOGCOM for all equipment and order as necessary. Follow up at D-60 and D-30.
- D-120** Request a Medical Technical Assist Visit from COMNAVSURFPAC/LANT. ISIC will schedule a Medical Readiness Evaluation within 90 days of deployment.
- D-120** Request an Environmental Health Survey from a Naval Environmental and Preventive Medicine Unit (NEPMU) within 120 days of deployment.
- D-90** Review blood types of crew. Update where necessary. Follow up at D-60 and D-30.
- D-90** Review G6PD and sickle cell status of crew. Update where necessary. Follow up at D-60 and D-30.
- D-90** Review immunizations and PPDs of crew. Update where necessary. Follow up at D-60 and D-30.
- D-90** Order additional medications to meet deployment requirements (i.e., current STD antibiotics, antimalarials, rabies vaccine, etc.). Follow up at D-60 and D-30.
- D-90** Review follow-up action on overdue supply requisitions. Ensure appropriate priorities are assigned and revise as necessary. Follow up at D-60 and D-30.
- D-90** Review dental records and schedule appointments to complete all work prior to deployment. Ensure that duplicate Panorax X-rays have been made.
- D-90** Order additional DPD test tablets, Endo Broth, and filter discs sufficient to last ½ of the deployment. Increase intensity of training in self and buddy aid and in the medical aspects of CBR warfare defense.
- D-90** Review CSMP to ensure that all jobs that might affect medical readiness are completed. Follow up at D-60 and D-30.
- D-90** Ensure that the senior HM and one other HM attend the pest control certification course. Other personnel such as Food Service Officers, Watch Captains, Master at Arms, and Jack of the Dust should also be required to attend the pest control course.

- D-90** Initiate action to get elective surgery completed far enough in advance for personnel to return to the ship prior to deployment. Arrange a medical officer's evaluation of current cases who might not be fit for deployment. Squadron medical officer will personally conduct direct liaison as required. Refer unresolved matters to the Force Medical Officer. [Note: You should also review all medical records for conditions that should not deploy until resolved.]
- D-90** Ensure that a suitable number of rat traps are aboard to quickly deal with a possible infestation of rats while deployed. Follow up at D-60 and D-30.
- D-90** All medical department personnel must be certified in CPR. At least one person in each work center should also be CPR certified.
- D-90** Make necessary appointments for eye examinations and ensure that each person requiring corrective lenses has at least two pair of glasses aboard, one of which must allow the wearing of the gas mask.
- D-60** Ensure that sufficient vaccines are maintained aboard to inoculate the crew and embarked troops with all routine and anticipated requirements. Include sufficient gamma globulin to immunize 10% of the crew.
- D-60** Ensure that an adequate supply of sanitizing agents for the superchlorination of potable water tanks is aboard for use in case the potable water system becomes contaminated.
- D-60** Arrange for BMET inspection of all medical equipment prior to deployment.
- D-30** Ensure that the medical officer supervisor for the independent duty corpsman is appointed.
- D-30** Review Fleet Surgeon Standing Orders.
- D-30** Review Battle Group Medical Officer Standing Orders.
- D-30** Review training of stretcher bearers with the damage control assistant.
- D-30** Review battle dressing stations to ensure that they meet the requirements of COMNAVSURFLANT/PACINST 6000.1 series. It is recommended that all sterile gear be opened and inspected for rust and gas sterilized at the nearest medical treatment facility.
- D-30** Intensify venereal disease control measures in accordance with SECNAVINST 6222.1D.
- D-30** Ensure that a current certificate of deratization or of deratization exemption is aboard no later than ten working days prior to deployment.
- D-30** Review Watch, Quarter, and Station Bill for correctness and for provision for the conditions of readiness and emergency stations.
- D-30** Ensure that materials are aboard to perform the Wilson/Edison test for Malaria Prophylaxis Compliance. Contact local NEPMUs or local EH/PM service to get pre-mixed reagents.
- D-15** Attend medical intelligence briefing by local NEPMU.
- D-15** Prepare CBR medical materials for quick distribution to the crew should the need arise.

Appendix E, Sources of Medical Intelligence

Navy Environmental and Preventive Medicine Units

NEPMU-2, Officer in Charge
1887 Powhatan Street
Norfolk, VA 23511-3394
DSN 564-7671 Comm (757) 444-7671
Fax DSN 564-1191 Comm (757)444-1191
NAVENPVNTMEDU TWO NORFOLK VA
nepmu2@wrair-emh1.army.mil

NEPMU-5, Officer in Charge
Naval Station Box 368143
3035 Albacore Alley
San Diego, CA 92136-5199
DSN 526-7070 Comm (619) 556-7070
Fax DSN 526-7071
Fax Commercial (619)556-7071
NAVENPVNTMEDU FIVE SAN DIEGO
CA
nepmu5oic@troutnosc.mil

NEPMU-6, Officer in Charge
Box 112, Bldg. 1535
Pearl Harbor, HI 96860-5040
DSN 471-9505 (via operator assistance)
Comm 808) 471-9505
Fax Comm (808) 474-9361
NAVENPVNTMEDU SIX PEARL
HARBOR HI
nepmu6@hq.pacom.mil

NEPMU-7, Officer in Charge
PSC 824, Box 2760
FPO AE 09623-5000
Commercial from US: 011-39-95-56-4101
Commercial from Italy: 095-56-4101
Fax 011-39-95-56-4100
Comm from Europe: 0039-95-56-4101
DSN 624-4101
NAVENPVNTMEDU SEVEN SIGONELLA
IT
sig1jam@sig10.med.navy.mil

Navy Disease Vector Ecology and Control
Center, Bangor, Officer in Charge
19950 Seventh Avenue N.E.
Poulsbo, WA 98370-7405

DSN 322-4450 Comm (360) 315-4450
Fax DSN 322-4455
Fax Commercial (360) 315-4455
NAVDISVECTECOLCONCEN BANGOR
WA
dva0xol@bumed30.med.navy.mil

Navy Disease Vector Ecology and Control
Center, Officer in Charge
Box 43, Naval Air Station (Building 437)
Jacksonville, FL 32212-0043
DSN 942-2424 Comm (904) 772-2424
Fax DSN 942-0107
Fax Commercial (904) 779-0107
NAVDISVECTECOLCONCEN
JACKSONVILLE FL
dvj0ccj@bumed30.med.navy.mil

Navy Medical Research Units

US Naval Medical Research Unit No. 3
PSC 452, Box 5000
FPO AE 09835-0007
NAVMEDRSCHU THREE CAIRO EG
Comm 011-20-2-284-1381
Fax 011-20-2-284-1382
namru@centcom.dsaa.osd.mil

US Naval Medical Research Unit No. 2
UNIT 8132
APO AP 96520
NAVMEDRSCHU TWO JAKARTA
Comm 011-62-21-421-4457 through 63
Fax 011-62-21-424-4507
namru2@wrair-emh1.army.mil

US Naval Medical Research Institute
Detachment
American Embassy Unit 3800
APO AA 34031-0008
NAVMEDRSCHINSTITUTE DET LIMA PE
Comm 011-51-14-52-9662
Fax 011-51-14-52-1560

