

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF SAFETY
DIVISION OF SAFETY SERVICES**

MARINE PATROL BUREAU STAFFING

**PERFORMANCE AUDIT REPORT
MARCH 1998**

TO THE FISCAL COMMITTEE OF THE GENERAL COURT:

We have conducted an audit of the staffing levels for the Marine Patrol Bureau of the Division of Safety Services within the Department of Safety to address the recommendation made to you by the Legislative Performance Audit and Oversight Committee. We conducted our audit in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to provide a reasonable basis for our findings and conclusions. Accordingly, we have performed such procedures as we considered necessary in the circumstances.

The purpose of the audit was to evaluate the sufficiency of Marine Patrol Bureau staffing and make recommendations regarding personnel levels for full-time permanent Marine Patrol officers, part-time boating season Marine Patrol officers, and navigation maintenance mechanics. The audit period encompassed the six-year period from calendar year 1992 through calendar year 1997.

This report is the result of our evaluation of the information noted above and is intended for the information of the management of the Department of Safety and the Fiscal Committee of the General Court. This restriction is not intended to limit the distribution of this report, which upon acceptance by the Fiscal Committee is a matter of public record.

Office of Legislative Budget Assistant
OFFICE OF LEGISLATIVE BUDGET ASSISTANT

March 1998

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**STATE OF NEW HAMPSHIRE
MARINE PATROL BUREAU STAFFING**

TABLE OF CONTENTS

TRANSMITTAL LETTER	i
SUMMARY	1
RECOMMENDATION SUMMARY	7
1. INTRODUCTION	9
1.1 Overview.....	9
1.2 Scope, Objectives, And Methodology.....	9
1.3 Statutory Authority.....	10
1.4 Boating And Watercraft Safety In New Hampshire.....	11
1.5 Organization And Management.....	12
1.6 Revenues And Expenditures.....	15
1.7 Report Outline.....	16
2. MARINE PATROL STAFFING	17
2.1 Boating Season Marine Patrol Officers.....	17
Observation No. 1: The Number Of Boating Season Officers Should Be Increased.....	20
2.2 Full-Time Permanent Marine Patrol Officers.....	28
Observation No. 2: Additional Full-Time Marine Patrol Officers Needed.....	30
2.3 Navigation Maintenance Mechanics.....	32
Observation No. 3: Additional Maintenance Personnel May Be Needed.....	32

TABLE OF CONTENTS (Continued)

3. OTHER ISSUES AND CONCERNS.....	35
3.1 Radio Communications Should Be Improved.....	35
3.2 Role Of The Marine Patrol Auxiliary.....	36
3.3 Develop The Mission And Goals Of The Marine Patrol	37
3.4 Improve Record Keeping And Data Collection.....	37
3.5 Seek Reimbursement For Repairs Made Under Warranty.....	39
3.6 High Employee Turnover	39
3.7 Appropriate And Necessary Equipment Should Be Identified And Purchased ...	40
3.8 Investigation Of Boat Thefts.....	42
3.9 Location Of Navigational Aids Should Be Recorded.....	42
3.10 Inconsistencies With Timesheets For Full-Time Permanent Personnel	43
4. CONCLUSION	45

APPENDICES

Estimated Cost Of Recommended Additional Personnel.....	A
Department Of Safety Response	B

LIST OF FIGURES

Figure 1: Most Common Types of Calls for Service (1995-1997)	2
Figure 2: Patrol Activity By Type (1992-1997)	3
Figure 3: Top Ten Violation Types for Warnings and Summonses for 1992-1997	4
Figure 4: Division of Safety Services Organization Chart.....	13
Figure 5: Patrol Areas	14

LIST OF TABLES

Table 1: Boating Accidents in New Hampshire.....	12
Table 2: Number of Marine Patrol Officers	15
Table 3: Restricted and Unrestricted Boating-Related Revenues (FY 1992 - 1997).....	16
Table 4: Marine Patrol Expenditures (FY 1992 - 1997)	16
Table 5: Boating Season Officers Hired and Completing the Season.....	18
Table 6: Estimated Marine Patrol Staffing During the Boating Season	21
Table 7: Pull Boat Area Designations.....	21
Table 8: Level I (Basic) Coverage.....	24
Table 9: Level II (Enhanced) Coverage.....	25

ABBREVIATIONS

FTE	Full-Time Equivalent
PFD	Personal Floatation Device

**STATE OF NEW HAMPSHIRE
MARINE PATROL BUREAU STAFFING**

RECOMMENDATION SUMMARY

OBSERVATION NUMBER	PAGE	LEGISLATIVE ACTION REQUIRED	RECOMMENDATION	AGENCY RESPONSE
1	20	NO	Increase the number of boating season officers from the 42 FTEs employed in 1997 to a minimum of 58 FTEs. If a higher level of coverage is desired, the number of boating season officers may be increased to 77.8 FTEs.	Concur
2	30	NO	Hire one full-time permanent Marine Patrol officer at the rank of sergeant at current staffing levels. If additional boating season officers are hired, a second full-time permanent Marine Patrol officer at the rank of sergeant should be hired.	Concur in Part
3	32	NO	Maintenance personnel should better record the amount of time taken to perform repairs and maintenance on Marine Patrol equipment and record travel time when performing maintenance or repairs in the field. If additional boating season officers are hired, one additional navigation maintenance mechanic may be needed.	Concur in Part

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STATE OF NEW HAMPSHIRE MARINE PATROL BUREAU STAFFING

1. INTRODUCTION

1.1 Overview

With passage of the Federal Boating Safety Act of 1971 states assumed greater responsibility for boating education and enforcement. This law was enacted because of an increasing number of recreational boating accidents and fatalities. In New Hampshire, RSA 21-P:10 establishes the Division of Safety Services within the Department of Safety and makes it responsible for watercraft safety regulation. According to Administrative Rule Saf-C 102.10, the Marine Patrol Bureau within the Division of Safety Services is responsible for watercraft safety education and enforcement as well as conducting public hearings for restrictions of watercraft operation.

The Marine Patrol Bureau headquarters is located at the Glendale Boathouse on Lake Winnepesaukee in Gilford. The Marine Patrol also has a small office for coastal operations at the Commercial Fish Pier in Portsmouth. The Marine Patrol has nine full-time permanent employees. During 1997, the Marine Patrol employed 50 boating season officers and nine part-time dispatchers for a total of 59 part-time employees. During 1997 the Marine Patrol had 54 patrol boats and four maintenance vessels. Total expenditures for the Marine Patrol between fiscal years 1992 and 1997 were \$7,979,548 while total boating-related revenues were \$16,922,036.

1.2 Scope, Objectives, And Methodology

We performed our audit of the Marine Patrol Bureau staffing consistent with recommendations made to the Fiscal Committee by the joint Legislative Performance Audit and Oversight Committee. This performance audit was conducted in accordance with generally accepted government auditing standards and accordingly included such procedures as we considered necessary in the circumstances.

Scope and Objectives

This report describes and analyzes the personnel resources of the Marine Patrol Bureau for calendar years 1992 through 1997. However, the Marine Patrol's data retention policy extends only to the current and two previous years. Therefore, most of our data analysis only includes the years 1995 through 1997. The issues we focused on primarily addressed the staffing levels for full-time permanent Marine Patrol officers and navigation maintenance personnel, as well as for boating season Marine Patrol officers. Our audit addressed the following specific objectives:

- Assess whether there are sufficient boating season Marine Patrol officers,

1. INTRODUCTION (Continued)

1.2 Scope, Objectives, And Methodology (Continued)

- Assess whether there are sufficient full-time permanent Marine Patrol officers, and
- Assess whether there are sufficient full-time permanent navigation maintenance personnel.

Methodology

To obtain general background information and develop an understanding of the Marine Patrol Bureau we reviewed reports, articles, performance audits, and publications by governmental and non-governmental organizations involved with the Marine Patrol Bureau, boating safety, and water use. We also contacted boating law enforcement agencies in other states. In addition, we conducted interviews with the Division of Safety Services Director, uniformed Marine Patrol officers, and navigation maintenance personnel. We also reviewed New Hampshire statutes and administrative rules, including those other agencies with authority related to boating and waterways. Finally, we reviewed organization charts of Division of Safety Services, and Department of Safety reports to the Governor and legislative committees.

To obtain information related to the audit objectives, we used three basic methods:

- Structured interviews with management personnel from Division of Safety Services and the Marine Patrol Bureau;
- Document reviews of State statutes, administrative rules, timesheets of full-time Marine Patrol officers and maintenance personnel, patrol logs from a sample of boating season Marine Patrol officers, computerized data related to summonses and warnings issued by Marine Patrol officers, calls for service received by the Marine Patrol from the public, and repair and maintenance logs related to boats, motors, and trailers owned by the Marine Patrol; and
- Telephone surveys of current and former boating season Marine Patrol officers.

1.3 Statutory Authority

Marine Patrol responsibilities are encompassed in RSA 270 and RSA 270-D. Various sections of RSA 270 authorize the Division of Safety Services to inspect all commercial and private boats on any public waters; ensure safe navigation on inland waters through placing and maintaining buoys, lights, and other aids to navigation; remove obstructions that impede navigation; and investigate all drownings or suspected drownings, serious injuries or deaths, or accidents resulting in property damage of \$500 or more on any New Hampshire waterway. RSA 270-D establishes general boating and water safety laws for New Hampshire public waters.

1. INTRODUCTION (Continued)

1.3 Statutory Authority (Continued)

RSA 270:12-a confers upon the director of the Division of Safety Services and Marine Patrol officers the powers of a peace officer with jurisdiction on all waters within the State having an area of at least ten acres. Specific authority is conferred to enforce the following statutes: RSA 270, RSA 637:9 (relative to unauthorized use of a motorboat or watercraft propelled by sail or paddle), RSA 642:1 (referring to interfering with a public servant), and RSA 642:6 (referring to escape from official custody). RSA 270:12-a (I)(f) also authorizes Marine Patrol officers to enforce provisions of the criminal code when a violation occurs on an island accessible only by boat and no representatives of any other law enforcement agency are available and the safety of persons or property requires immediate action; where trespass is committed on land adjacent to a body of water by a person using a boat as a means of transportation; and upon request for assistance by another peace officer. Marine Patrol officers made 43 arrests, issued 1,308 summonses, and issued 5,264 warnings during calendar year 1997.

RSA 270:12-c authorizes the commissioner of the Department of Safety to establish an auxiliary Marine Patrol staffed by either paid, part-time employees or volunteers to assist the Marine Patrol in carrying out its duties. Marine Patrol Auxiliary members do not have arrest powers, nor do they have the ability to issue citations. During 1997, the Marine Patrol Auxiliary had about 25 members. Marine Patrol Auxiliary volunteers patrol their local lakes and report infractions to the Marine Patrol. They may also conduct courtesy inspections of watercraft. Auxiliary members are each issued a placard for their boat and a shirt identifying them as a Marine Patrol Auxiliary officer. They must use their own boats and pay for their own gas.

1.4 Boating And Watercraft Safety In New Hampshire

During 1997 there were 90,408 boats registered in the State of New Hampshire. In addition, there are over 1,300 lakes in the State, having an area of over 149,000 surface acres, as well as 3,225 miles of river, and 18 miles of seacoast. By Marine Patrol estimates there are approximately 3,000 wooden spar buoys, 104 permanent lighted buoys, and 350 signs in New Hampshire lakes. As of 1997, the only mandatory boating safety knowledge requirement for operation of non-commercial watercraft was found in RSA 270-D, which mandates that persons registering any vessel must initial the checklist portion of the registration form certifying the registrant's knowledge of boating safety laws. No person under the age of 16 may operate a motor powered boat having more than 25 horsepower unless accompanied by an adult.

According to a study conducted in 1996 by Dartmouth College for the New Hampshire Lakes Association, New Hampshire has had more accidents per water acre and per 1,000 boats registered than any other state during the 10-year period 1985 through 1995. As shown in Table 1, the number of accidents reported during the audit period has ranged from a high of 100 in 1996 to a low of 57 in 1994. A 1993 statutory revision changed the reporting requirement for accidents from \$200

1. INTRODUCTION (Continued)

1.4 Boating And Watercraft Safety In New Hampshire (Continued)

in damage to \$500. In addition, accidents involving a fatality or serious injury must be reported.

Table 1

Boating Accidents in New Hampshire

Year	Number of Accidents
1992	86
1993	91
1994	57
1995	98
1996	100
1997	69

Source: LBA analysis of Marine Patrol data

1.5 Organization And Management

The Marine Patrol Bureau is within the Department of Safety's Division of Safety Services. The Division of Safety Services consists of the Marine Patrol Bureau, the Moorings Program, and the Bureau of Tramway and Amusement Ride Safety (Figure 4). The division is overseen by an unclassified director who is assisted by an executive secretary.

The Marine Patrol Bureau employs nine full-time permanent employees and during the boating season hires part-time employees. Of the full-time permanent employees, four are uniformed officers with enforcement responsibilities, three have maintenance duties, and two have clerical responsibilities. The four uniformed employees include a captain, a lieutenant, and two sergeants. Employees hired for the boating season include radio dispatchers, officers, and officer trainees.

During the 1997 boating season, which begins with ice out on the lakes and ends in the fall, there were 50 boating season officers and nine part-time dispatchers. The lieutenant directly supervised the two sergeants, dispatchers, maintenance personnel, and 15 boating season officers assigned to Lake Winnepesaukee and Lake Winnisquam. One sergeant supervised 11 boating season officers assigned to the seacoast and Rockingham County. The other sergeant supervised the remaining 24 boating season officers located throughout the State.

Boating season officers may work a 40-hour week or less depending upon their availability and the needs of the Marine Patrol. Radio dispatchers are on duty between 8 a.m. and midnight during the boating season and receive incoming calls, walk-ins, and radio transmissions. In past years when dispatchers were not on duty, incoming calls were handled by the Belknap County Sheriff's Department. However, the New Hampshire State Police took over the dispatching duties handled by the Belknap County Sheriff's Department in the fall of 1997. Between January 1995 and December 1997, the Marine Patrol received 60,320 incoming telephone

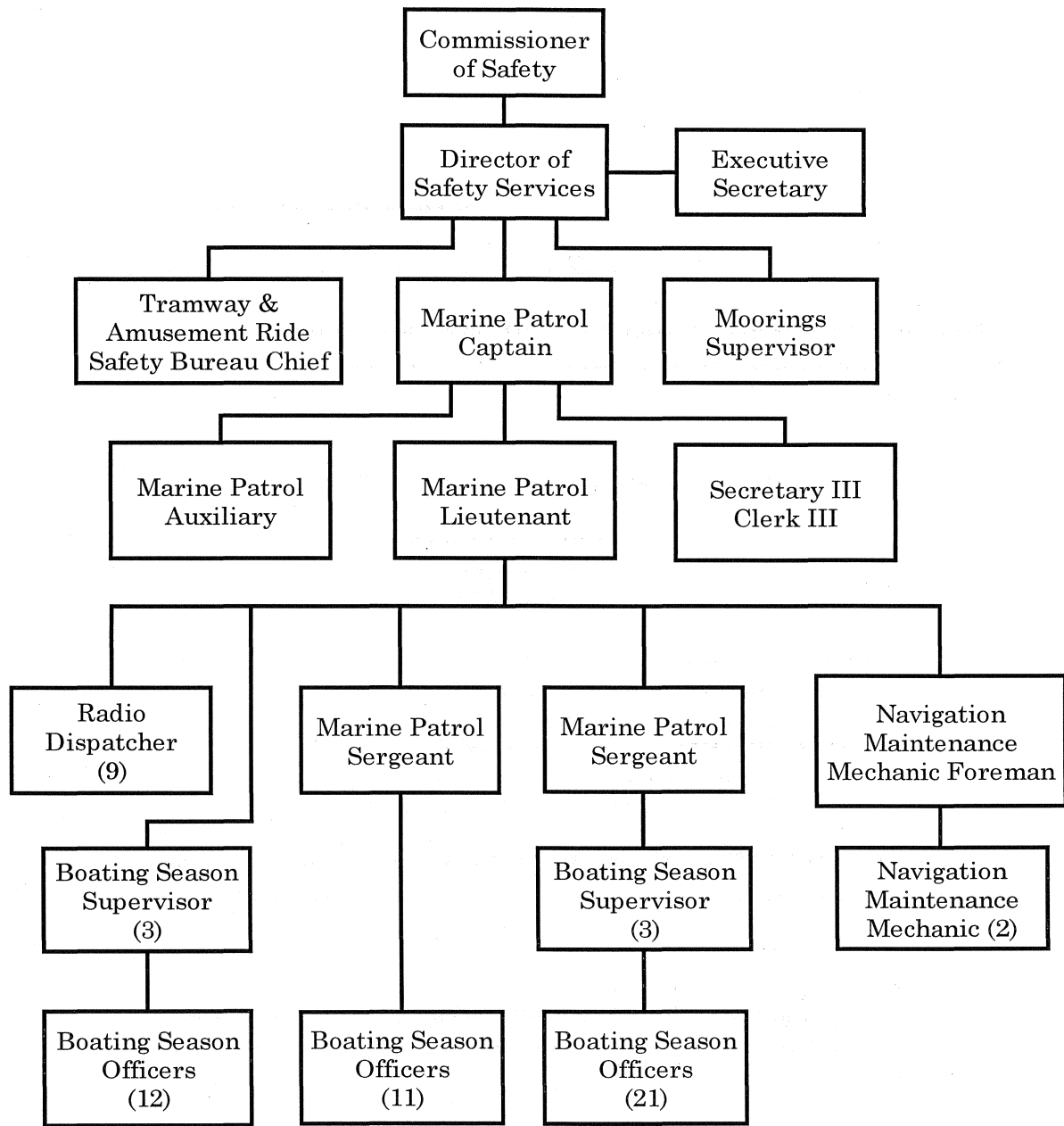
1. INTRODUCTION (Continued)

1.5 Organization And Management (Continued)

calls, 9,690 walk-ins, and 53,212 radio transmissions at the Glendale facility. Of these contacts 7,377 were calls for service requiring intervention by a Marine Patrol officer.

Figure 4

Division of Safety Services Organization Chart



Source: LBA analysis of Marine Patrol information.

1. INTRODUCTION (Continued)

1.5 Organization And Management (Continued)

Division of Safety Services and Marine Patrol Bureau managers voiced concern with the turnover among boating season officers. They report the bulk of officers leave within a short time period for other law enforcement jobs. According to Marine Patrol management these other jobs are attractive to boating season officers because they offer more money, provide benefits, more equipment, and better work schedules. As a result, a significant amount of Marine Patrol resources go into recruiting and training new officers every year.

The total number of officers between 1992 and 1997 decreased 18 percent from 66 in 1992 to 54 in 1997 as shown in Table 2. The number of full-time officers rose from five in 1992 to six in 1994, then dropped to four in 1995. Meanwhile, the number of boats registered in the State increased 13.9 percent from 79,356 in 1992 to 90,408 in 1997.

Table 2

Number of Marine Patrol Officers

Year	Full-Time Permanent Marine Patrol Officers	Boating Season Marine Patrol Officers	Total Marine Patrol Officers
1992	5	61	66
1993	5	54	59
1994	6	56	62
1995	4	46	50
1996	4	47	51
1997	4	50	54

Source: LBA analysis of Marine Patrol data.

1.6 Revenues And Expenditures

Between fiscal years 1992 and 1997, boating-related revenues totaled \$16,922,036 while expenditures totaled \$7,979,548, a difference of \$8,942,488. The Marine Patrol receives funding from the federal government and the State's General Fund (Table 3). Total boating-related revenues from all sources have grown steadily between fiscal years 1992 and 1997. Almost half of these revenues came from boat registrations (\$7.3 million), while another \$4.1 million can be attributed to unrefunded road tolls. Federal revenues account for almost \$2.5 million during the six-year period. According to RSA 270-E:7 all fees and fines related to boat registrations and unrefunded road tolls shall be made available to the Division of Safety Services. However, boating-related revenues have historically been categorized as unrestricted revenue and directed to the General Fund.

Over the six-year audit period from fiscal year 1992 through fiscal year 1997, approximately 30 percent of Marine Patrol expenditures were funded by a federal Recreational Boat Safety Grant. The remaining 70 percent of Marine Patrol funding is made up of General Fund appropriations. Overall, Marine Patrol expenditures have varied from year to year without any obvious trends as seen in Table 4. Total

1. INTRODUCTION (Continued)

1.6 Revenues And Expenditures (Continued)

Marine Patrol expenditures were at their highest in fiscal year 1993 (\$1,716,808) and lowest in fiscal year 1996 (\$1,080,081). Between fiscal years 1992 and 1997, a total of \$7,979,548 was expended for the Marine Patrol. Of this amount, \$4,816,377 was personnel-related and \$2,885,225 was non-personnel related.

Table 3

Restricted and Unrestricted Boating-Related Revenues (FY 1992 - 1997)

Revenue Source	1992	1993	1994	1995	1996	1997	Total
Boat Registrations	\$1,130,556	\$1,099,772	\$1,089,673	\$1,419,716	\$1,240,294	\$1,359,044	\$7,339,055
Unrefunded Road Toll	637,143	657,642	640,066	628,550	790,856	752,579	4,106,836
Federal Funds	347,777	532,626	620,155	334,136	243,538	386,963	2,465,195
Boat Taxes	290,212	299,734	324,292	345,772	379,133	417,867	2,057,010
Mooring Decal Fees	116,325	96,675	100,275	102,700	102,450	103,425	621,850
Boat Fines	28,023	48,422	47,771	56,296	55,292	74,401	310,205
Other	2,601	2,100	3,530	4,592	4,104	4,958	21,885
Total	\$2,552,637	\$2,736,971	\$2,825,762	\$2,891,762	\$2,815,667	\$3,099,237	\$16,922,036

Source: LBA analysis of Department of Safety data.

Table 4

Marine Patrol Expenditures (FY 1992 - 1997)

Expenditures	1992	1993	1994	1995	1996	1997	Total
Personal Services - Permanent	\$236,088	\$248,758	\$288,933	\$284,737	\$241,532	\$243,866	\$1,543,914
Overtime	0	0	20,592	21,608	21,467	18,902	82,569
Personal Services - Temporary	350,944	444,913	420,505	382,829	369,845	436,609	2,405,645
Benefits	120,636	138,787	143,125	135,720	116,787	129,194	784,249
Total Personnel	707,668	832,458	873,155	824,894	749,631	828,571	4,816,377
Non-Personnel	367,363	831,658	648,876	317,771	287,525	432,032	2,885,225
Travel	36,524	52,692	49,032	46,779	42,925	49,994	277,946
Total Expenditures	\$1,111,555	\$1,716,808	\$1,571,063	\$1,189,444	\$1,080,081	\$1,310,597	\$7,979,548

Source: LBA analysis of Statements of Appropriation.

1.7 Report Outline

The remaining sections of the report present our analysis of the Marine Patrol Bureau's full- and part-time staffing. Chapter 2 contains our review of the sufficiency of the full- and part-time personnel during the audit period. Chapter 3 contains our section on Other Issues and Concerns. Due to the specific direction we received from the joint Fiscal and Legislative Performance Audit and Oversight Committees, we did not pursue a number of potential issues discovered during our field work. These issues may have been further investigated during a wider-scope performance audit. They are presented as other issues and concerns in Chapter 3, along with our informal suggestions for their rectification. A short conclusion is followed by an appendix section which contains the estimated costs of recommended additional personnel and the Department of Safety's response.

STATE OF NEW HAMPSHIRE MARINE PATROL BUREAU STAFFING

2. MARINE PATROL STAFFING

The full-time officers are responsible for ensuring the Marine Patrol is staffed, organized, and equipped to meet the demands of the boating season and to meet the statutory responsibilities as described in RSA 270 and RSA 270-D. The boating season starts when the ice is out and ends in the fall. The Marine Patrol provides daily patrol coverage for the busiest part of the boating season, which begins mid-June and ends Labor Day weekend. Prior to mid-June and after Labor Day weekend, the Marine Patrol provides some weekend patrol coverage, responds to call outs, and places or removes navigational aids.

From calendar year 1995 to calendar year 1997 the Marine Patrol received approximately 7,400 calls for service from the public. The majority of these were answered by boating season patrol officers rather than full-time officers. In addition, during their patrols boating season officers regularly provide assistance to boaters, conduct courtesy inspections of watercraft, as well as carry out their enforcement-related functions of issuing summonses and warnings, and make arrests for boating while intoxicated and other offenses. From 1992 through 1997 the Marine Patrol issued almost 27,000 warnings and over 7,000 summonses, conducted approximately 1,240 courtesy inspections, and assisted over 500 watercraft in some manner.

2.1 Boating Season Marine Patrol Officers

As reported earlier, the Marine Patrol adds approximately 50 boating season officers to its roster to provide patrol coverage during the boating season. The additional officers work a variety of hours, but most work every weekend from the beginning of their service in May or June through to the end of the summer. In 1997, there were 32 boating season officers who worked 40 hours a week and 18 boating season officers who worked less than 40 hours a week, resulting in 42 full-time equivalent officers.

Marine Patrol management indicated boating season officers average only two seasons before leaving the Marine Patrol. The Marine Patrol is routinely in the position of recruiting and hiring boating season officers because of the number of officers who leave employment before, during, and after the boating season.

As Table 5 shows, the Marine Patrol loses a number of new hires between the time of the conditional employment offer and the end of the boating season. The Marine Patrol dismisses some of the new hires because they fail the background investigation or are determined not to be appropriate Marine Patrol officer recruits for other reasons.

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Table 5

Boating Season Officers Hired and Completing the Season

Year	Number of Conditional Employment Offers	Number of New Hires Completing the Boating Season	Percent of New Hires Completing the Boating Season
1992	30	25	83
1993	40	18	45
1994	25	13	52
1995*	12	2	17
1996	18	11	61
1997	31	17	55
1998	17	N/A	N/A

*Due to budget constraints in 1995, part-time officer certification training was eliminated leaving only two new officers who already had part-time officer certification.
N/A - Not Available
Source: LBA analysis of Marine Patrol data.

Most of the new hires and veteran officers leaving the Marine Patrol do so on their own. According to a 1996 survey of boating season officers conducted by the Department of Safety, the top ten reasons for turnover, in descending order, included:

- Being unarmed,
- No radios,
- Poor management,
- No benefits,
- Low pay,
- Seasonal work,
- Poor equipment,
- Hot uniforms,
- Personal expenses, and
- Dangerous work.

The Marine Patrol also loses boating season officers because the officers find full-time employment, often with other law enforcement agencies.

The process for hiring new boating season officers begins long before the start of the boating season. In the fall of each year, the Marine Patrol begins recruiting boating season officers for the next season. The Marine Patrol advertises in local newspapers throughout the State. Applicants must pass mandatory physical fitness and written aptitude testing which generally occurs in October. Applicants with scores of 80 percent or higher are interviewed.

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Interviews with prospective candidates are conducted in November by the full-time Marine Patrol officers and the Department of Safety human resources staff. Recruits recommended by the interview board receive a conditional offer of employment and are required to complete a Personal History Statement Background Form that is reviewed by the Marine Patrol captain and, if acceptable, assigned to an investigator. The investigator, generally a full-time officer, conducts a thorough background investigation which involves examining the recruit's employment history, military records (if applicable), criminal record checks, financial history, education, personal relationships, and any other information that is pertinent to eligibility. Background investigations generally need to be completed for all recruits before they enter the academy. The short time frame requires the investigators to perform most of the background work via telephone versus conducting face to face interviews.

The Marine Patrol captain may terminate a background investigation at anytime during the process. Background investigations may be terminated if a recruit fails to disclose information such as:

- Facts related to leaving a job,
- A domestic violence incident,
- A number of short term jobs, or
- Racial or gender biases.

Recruits who successfully complete the background investigation have a final interview with the Director of Safety Services and the Marine Patrol captain. The recruits are then fingerprinted, photographed, and the necessary paperwork is completed for enrollment into part-time police officer training at New Hampshire Police Standards and Training Academy.

Part-time police officer certification at the New Hampshire Police Standards and Training Academy consists of approximately 100 hours of classroom and practical training. This is followed by another 100 hours of Marine Patrol classroom training conducted by the full-time officers, and approximately 40 to 60 hours of on-the-water training. Training begins in February and finishes in late May or early June, depending on how quickly recruits are able to complete their on-the-water training.

On-the-water training involves extensive practical training in boat handling skills. Recruits work one-on-one with a field training officer, usually a veteran boating season officer, to complete this phase of training. In some years, the Marine Patrol has had insufficient numbers of field training officers to provide training to recruits. Marine Patrol management anticipates having approximately five field training officers for the 1998 season. Full-time officers fill-in as field training officers when needed. Marine Patrol officials reported the on-the-water training is inadequate because it is not long enough and limits the exposure trainees have to situations they may encounter while on actual patrol.

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

After successfully completing training and testing, recruits are sworn in as Marine Patrol Officer Trainees. An officer trainee is required to complete a minimum forty hours of "ride along" time with a veteran boating season officer before patrolling on their own. According to Marine Patrol officials, working with a veteran officer allows a trainee officer to observe a seasoned Marine Patrol officer during routine shifts and to learn from that officer. Trainee officers are not allowed to go on solo patrols until they have completed the ride along time with a veteran officer and the captain, lieutenant, or staff training supervisor has released the trainee officer from this phase of training.

After completing the ride along phase, trainee officers are expected to assume patrol coverage and perform the duties of a Marine Patrol officer in their assigned patrol areas. Officer trainees report to a boating season supervisor or to a full-time officer for supervision.

Observation No. 1

The Number Of Boating Season Officers Should Be Increased

As the primary agency responsible for enforcing State boating and criminal laws on New Hampshire's waterways, Marine Patrol officers are often the first responders to accident scenes on the water or drownings. Consequently, adequate staffing is essential to carrying out the mission of the Marine Patrol and protecting the public on New Hampshire's waterways. However, boating season staffing levels that have often times been less than adequate have resulted in slow or no responses to calls for service and insufficient back-up for patrol officers. In addition, lower numbers of boating season officers has meant less frequent patrols and presence on the State's waterways.

The staffing level of boating season Marine Patrol officers declined between 1992 and 1995. Since 1995 the number of full-time equivalent boating season officers has increased, although not to the 1992 level. The decrease in the number of full-time equivalent boating season officers has reduced the weekly number of hours available for coverage of New Hampshire waterways. During the 1992 boating season, there were approximately 2,120 hours of coverage available per week for patrol of New Hampshire waterways. This decreased to a low of 1,400 available hours per week in 1995. In 1997, the available hours of coverage per week was 1,680. Table 6 on the following page shows the estimated number of full-time equivalent boating season Marine Patrol officers and available hours of coverage per week for each year between 1992 and 1997.

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

Table 6
Estimated Marine Patrol Staffing During the Boating Season

Year	Number of Full-Time Equivalent Boating Season Officers	Available Hours of Coverage Per Week
1992	53	2,120
1993	52	2,080
1994	42	1,680
1995	35	1,400
1996	39	1,560
1997	42	1,680

Source: LBA analysis of Marine Patrol data.

Throughout the 1997 boating season, 24 “fixed” boats were stationed on lakes Ossipee, Newfound, Squam, Sunapee, Wentworth, Winnepesaukee, and Winnisquam, and on the seacoast. Thirty pull boats were assigned to Marine Patrol officers patrolling wide geographic areas which include several bodies of water. The eight regions, designated Area A through Area H, divided up the rest of the State. Table 7 below describes generally the coverage of each area. The map found in Figure 5 on page 14 provides a geographic illustration of these patrol areas.

Table 7
Pull Boat Area Designations

Area	Covers
A	Coos County and northern Grafton County
B	Southeastern Coos County and parts of Carroll County (excluding Ossipee and Wentworth lakes)
C	Eastern Grafton County, western Carroll County, and northern Belknap County (excluding Newfound and Squam lakes)
D	Southeastern Grafton County
E	Sullivan County and western Merrimack County (excluding Sunapee Lake)
F	Northeastern Merrimack County, southern Belknap County (excluding Lakes Winnepesaukee and Winnisquam), and northern Strafford County
G	Cheshire County, Hillsborough County, and southwestern Merrimack County
H	Rockingham County (excluding the seacoast), southeastern Merrimack County, Hillsborough County east of the Everett Turnpike, and southeastern Strafford County

Source: LBA analysis of Marine Patrol data.

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

We analyzed patrol logs of officers over the three-year period from 1995 through 1997. We selected 11 officers from each year, who we judged to have the most detailed logs. For each officer, we selected 13 dates from each year, for a total of 429 days of boating season patrol activity for the three-year period. We found officers assigned to pull boats spent approximately one-third of their time traveling and approximately 57 percent of the time on the water. The remaining ten percent of their time was spent on various administrative functions. The high percentage of travel limits the amount of actual time the officers are able to be on the water enforcing boating laws and ensuring safe waterways. We believe hiring additional boating season officers would reduce this travel time. Officers assigned to fixed boats spent approximately 85 percent of their time on the water.

We obtained and examined staffing needs assessments completed by Marine Patrol supervisors from 1992, 1993, 1995, and 1996 boating seasons. (No needs assessment was completed for the 1994 boating season.) We found the needs assessments unsatisfactory for reaching a conclusion regarding staffing needs because of inconsistencies among the different formats for the various years. In the absence of any marine law enforcement staffing standard, formula, or in-depth assessment of staffing needs, we relied on our own analysis as well as interviews with Marine Patrol management and staff, and other interested parties to determine an adequate number of boating season officers for the Marine Patrol. Interviews with Marine Patrol personnel and management indicated an "ideal" number of Marine Patrol officers ranged from 50 to 80.

We examined calls for service data provided by the Marine Patrol to determine the demand for services. A call for service could be anything from a missing buoy or complaint regarding a jet ski to a boating accident with injuries or drowning. This information, while not complete, was the best information available for determining the demand for Marine Patrol services. There were approximately 2,400 recorded calls for service statewide annually between 1995 and 1997. Marine Patrol management reported that as many as 30 percent of the calls for service went unanswered. Data limitations prevented us from determining how many calls for service went unanswered. The decision to answer a call for service, as well as response time, depends upon the number of patrol officers and the ability to travel from their patrol locations to the scene. Fifty-four percent of the officers responding to our survey question regarding calls for service response times indicated it takes more than 30 minutes to respond. Officers assigned to fixed boats indicated response times increase, particularly on Lake Winnepesaukee, when available patrol coverage was minimal. An increase in the number of boating season officers should improve response times and provide resources to answer calls for service.

Numerous problems at the Marine Patrol have been manifested by officer turnover. The Marine Patrol has had difficulty attracting new recruits and retaining officers

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

once they have been trained. Several Marine Patrol officials stated equipment, pay, and the seasonal nature of the work makes it difficult to attract and keep officers. A survey of Marine Patrol officers, conducted by the Department of Safety's Division of Administration, found the most important reasons for officer turnover involved equipment issues, salary, and benefits. Our survey also found officers were concerned about inadequate and improper equipment to effectively and safely perform their duties. In addition, current staffing levels and patrol area assignments do not allow for adequate back-up or assistance for officers on patrol. Marine Patrol officers indicated they did not have timely, if any, back-up or assistance available from other Marine Patrol officers when on patrol. Back-up was rated as poor by 48 percent of the officers and rated as fair by 19 percent of the officers. The lack of readily-available back-up has impacted some officers from carrying out their duties. For example, some officers reported that at some point they had not made arrests or pursued suspects because they did not have back-up. Retention and recruitment will continue to be a problem for the Marine Patrol if these issues are not addressed.

We examined the Marine Patrol's computerized database which tracks officer patrol activities such as warnings and summonses issued, boats assisted, courtesy inspections, and other activities. During 1997, Marine Patrol officers engaged in 6,911 such patrol activities. The top ten water bodies in descending order in terms of Marine Patrol officer activity were: lakes Winnepesaukee, Squam, Winnisquam, and Sunapee, the Connecticut River, lakes Ossipee and Newfound, the seacoast, the Merrimack River, and the Piscataqua River. As noted earlier, lakes Winnepesaukee, Squam, Winnisquam, Sunapee, Ossipee, and Newfound, and the seacoast (including the Atlantic Ocean and the Piscataqua River) all have boats permanently assigned. However, the Connecticut and Merrimack Rivers do not have boats permanently assigned nor are they separate patrol areas. As this analysis showed, the Connecticut and Merrimack Rivers may benefit from assignment as separate patrol areas.

We conducted a staffing analysis based upon assumptions synthesized from the surveys, interviews, demand indicators such as calls for service, and the officer patrol activity analysis. We developed service levels based on two hypothetical levels of coverage as shown on the following pages. Either of these allocations should provide better statewide coverage of New Hampshire's waterways. The Level I (Basic) coverage analysis is based on the assumption that there is only one shift per day (12:00 noon to 8:00 PM) for all locations except for Lake Winnepesaukee and the seacoast. Lake Winnepesaukee and the seacoast would operate with two shifts; the first shift operates from 10:00 AM to 6:00 PM while the second shift operates from 6:00 PM to 2:00 AM. Other assumptions in developing this analysis were: 1) one boat is assigned to each patrol area, 2) there is higher boat traffic on Saturday and Sunday, 3) two persons are assigned per boat on the seacoast due to the

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

conditions, 4) activity on Lake Wentworth does not justify a boat to be permanently assigned, and 5) the Connecticut and Merrimack Rivers do not need dedicated boats, but additional staff for their respective areas are needed.

Table 8

Level I (Basic) Coverage

Fixed Boats							
Lake/Area	Shifts per Day	Days per Week	Boats per Shift	Persons per Boat	Person-Hours per Week	FTEs	Explanation
Newfound	1	5	1	1	40.0	1.0	One patrol area per shift Monday - Friday. Two patrol areas per shift Saturday and Sunday.
	1	2	2	1	32.0	0.8	
Ossipee	1	5	1	1	40.0	1.0	One patrol area per shift Monday - Friday. Two patrol areas per shift Saturday and Sunday.
	1	2	2	1	32.0	0.8	
Seacoast	2	7	2	2	448.0	11.2	Two patrol areas per shift daily.
Squam	1	5	1	1	40.0	1.0	One patrol area per shift Monday - Friday. Two patrol areas per shift Saturday and Sunday.
	1	2	2	1	32.0	0.8	
Sunapee	1	5	1	1	40.0	1.0	One patrol area per shift Monday - Friday. Two patrol areas per shift Saturday and Sunday.
	1	2	2	1	32.0	0.8	
Winnepesaukee	2	4	3	1	192.0	4.8	Three patrol areas per shift Monday - Thursday.
	2	3	5	1	240.0	6.0	Five patrol areas per shift Friday - Sunday.
Winnisquam	1	5	1	1	40.0	1.0	One patrol area per shift Monday - Friday. Two patrol areas per shift Saturday and Sunday.
	1	2	2	1	32.0	0.8	
Subtotal					1,240.0	31.0	
Pull Boats							
A	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
B	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
C	1	7	1	1	56.0	1.4	One patrol area per shift daily.
D	1	7	3	1	168.0	4.2	Three patrol areas per shift daily (including the Connecticut River).
E	1	7	3	1	168.0	4.2	Three patrol areas per shift daily (including the Connecticut River).
F	1	5	2	1	80.0	2.0	Two patrol areas per shift Monday - Thursday.
	1	2	3	1	48.0	1.2	Three patrol areas per shift Friday - Sunday.
G	1	7	3	1	168.0	4.2	Three patrol areas per shift daily (including the Connecticut River).
H	1	7	3	1	168.0	4.2	Three patrol areas per shift daily (including the Connecticut River).
Subtotal					1,080.0	27	
Grand Total					2,320.0	58.0	

Source: LBA analysis.

Level II (Enhanced) coverage is similar to the Level I coverage but increases the number of hours available for patrol. The Level II coverage analysis was based on the assumption that two shifts per day are required for fixed boat locations (except

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

for Lake Wentworth, which requires only one shift). Under Level II coverage, the Connecticut and Merrimack Rivers become separate patrol areas. These shifts will provide coverage for the State's most active lakes during the peak boating hours. For Lake Wentworth, the Connecticut and Merrimack Rivers, and all pull boat locations, only one shift (12:00 noon to 8:00 PM) is required. Other assumptions made include: 1) there is higher boat traffic Friday through Sunday, 2) one boat is assigned to each patrol area, and 3) two persons are assigned per boat on the seacoast due to the conditions.

Table 9

Level II (Enhanced) Coverage

Fixed Boats							
Lake/Area	Shifts per Day	Days per Week	Boats per Shift	Persons per Boat	Person-Hours per Week	FTEs	Explanation
Newfound	2	4	1	1	64.0	1.6	One patrol area per shift Monday - Thursday.
	2	3	2	1	96.0	2.4	Two patrol areas per shift Friday - Sunday.
Ossipee	2	7	1	1	112.0	2.8	One patrol area per shift daily.
Seacoast	2	4	2	2	256.0	6.4	Two patrol areas per shift Monday - Thursday.
	2	3	3	2	288.0	7.2	Three patrol areas per shift Friday - Sunday.
Squam	2	4	1	1	64.0	1.6	One patrol area per shift Monday - Thursday.
	2	3	2	1	96.0	2.4	Two patrol areas per shift Friday - Sunday.
Sunapee	2	4	1	1	64.0	1.6	One patrol area per shift Monday - Thursday.
	2	3	2	1	96.0	2.4	Two patrol areas per shift Friday - Sunday.
Wentworth	1	7	1	1	56.0	1.4	One patrol area per shift daily.
Winnepesaukee	2	4	4	1	256.0	6.4	Four patrol areas per shift Monday - Thursday.
	2	3	6	1	288.0	7.2	Six patrol areas per shift Friday - Sunday.
Winnisquam	2	4	1	1	64.0	1.6	One patrol area per shift Monday - Thursday.
	2	3	2	1	96.0	2.4	Two patrol areas per shift Friday - Sunday.
Subtotal					1,896.0	47.4	
Pull Boats							
A	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
B	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
C	1	7	1	1	56.0	1.4	One patrol area per shift daily.
D	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
E	1	7	2	1	112.0	2.8	Two patrol areas per shift daily.
F	1	4	2	1	64.0	1.6	Two patrol areas per shift Monday - Thursday.
	1	3	3	1	72.0	1.8	Three patrol areas per shift Friday - Sunday.
G	1	4	2	1	64.0	1.6	Two patrol areas per shift Monday - Thursday.
	1	3	3	1	72.0	1.8	Three patrol areas per shift Friday - Sunday.
H	1	4	2	1	64.0	1.6	Two patrol areas per shift Monday - Thursday.
	1	3	3	1	72.0	1.8	Three patrol areas per shift Friday - Sunday.
Connecticut River	1	7	4	1	224.0	5.6	Four patrol areas per shift daily.
Merrimack River	1	4	1	1	32.0	0.8	One patrol area per shift Monday - Thursday.
	1	3	2	1	48.0	1.2	Two patrol areas per shift Friday - Sunday.
Subtotal					1,216.0	30.4	
Grand Total					3,112.0	77.8	
Source: LBA analysis.							

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

It is important to note these estimates should be considered flexible rather than static. For example, holiday weekends that include a Monday will require more coverage on Monday and should be staffed accordingly.

The Marine Patrol needs to have enough officers available during the boating season to provide an adequate level of service to the public in a timely manner. The public expects the Marine Patrol to be available to render assistance when requested. The inability of the Marine Patrol to respond to all calls for service reduces its effectiveness and capacity to fulfill its statutory responsibilities as described in RSA 270. Appendix A provides cost estimates based on current pay rates for each of the coverage levels presented here.

RECOMMENDATION:

In order to address the issue of unanswered calls for service, reduce the time boating season officers spend traveling from one water body to another, improve response time to calls for service, and enhance officer back-up we recommend the Department of Safety, Division of Safety Services increase the number of boating season Marine Patrol officers from the 42 FTEs employed in 1997 to a minimum of 58 FTEs statewide and allocated as shown in Table 8. If a higher level of service is desired, the number of Marine Patrol officers may be increased to 77.8 FTEs statewide and allocated as shown in Table 9. (Our estimate of the personnel cost for this recommendation appears in Appendix A.)

AUDITEE RESPONSE:

We concur with the recommendation that the number of boating season officers should be increased. We believe the number of officers should be 75-80, and we agree that the public expects the Marine Patrol to be available to render assistance when requested. The Department also believes that its service to the public is achieved by increased visibility on the lakes. Thus, less travel time to and from bodies of water is essential, especially during peak boating hours. Enhanced coverage will assure enough officers available during the boating season to provide the level of service the public deserves.

In order to meet the enhanced coverage of boating season Marine Patrol officers contemplated in the recommendation, we need to change existing legislation. Current law requires that seasonal Marine Patrol officers complete the basic part-time officers' academy at the Police Standards and Training Council. These prospective employees are required to attend numerous hours of training in areas of the law that are unrelated to their public service. If the training curriculum was designed in such a way that the officers receive less classroom time and more field training, it would

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

be easier to recruit more people interested in serving. The training requirements should be tailored to allow for the hiring of individuals, such as retired persons, college students, school teachers, who would primarily be concerned with enforcing boating laws that promote safety, rather than making arrests or pursuing suspects. These individuals can receive assistance in the field from supervisors and more advanced Marine Patrol officers, who have experience enforcing the criminal code, as well as area police officers, who will be able to provide backup.

The Department is supporting 1998 legislation, House Bill 1275, which would exempt the seasonal Marine Patrol officers from RSA 188:F-26. If passed, this legislation will help increase the number of prospective candidates for boating season officers. The Department is also looking into marketing ideas to increase the pool of prospective officers.

Additionally, we need to increase the hourly wage rate of boating season officers. Presently, the Department cannot do this without the authorization of the Department of Personnel. The hourly rate should be increased by at least two dollars an hour. It is extremely difficult to hire qualified people at the current rate. The Commissioner should be able to set the hourly rate, since he is in the best position to determine if the pay is inadequate for the type of service we ask these people to perform. An increase in the hourly rate will make it much easier to recruit retired persons who may have prior experience in law enforcement or boating.

The Department also believes that we need to increase the number of Marine Patrol Auxiliary members. RSA 270:12-c authorizes the Commissioner to establish an auxiliary Marine Patrol staffed by either paid, part-time employees or volunteers to assist the Marine Patrol in carrying out its duties. Marine Patrol Auxiliary members do not have arrest powers, nor do they have the ability to issue citations. However, if supervised by a full-time officer, and centrally located on lakes across the State that may not receive as much attention, the Marine Patrol Auxiliary will be a valuable tool in promoting safety and increasing visibility. The volunteers use their own boats and pay for their own gas. We should consider giving them some amount of reimbursement for gas used during patrol.

With regard to the issue of inadequate equipment, the lack of funding in the past has resulted in a restriction on spending for equipment. Despite the fact that the number of boating registrations have steadily increased, Marine Patrol funding has not. Currently, the Marine Patrol does not receive all of the revenues and fines associated with watercraft safety. As a result, a large amount of money is spent on maintenance and repair of existing boats and other equipment. However, the Department repeatedly assesses the needs of the Marine Patrol and expends available funds for the purchase and repair of equipment that is necessary for watercraft safety. The

2. MARINE PATROL STAFFING (Continued)

2.1 Boating Season Marine Patrol Officers (Continued)

Observation No. 1: The Number Of Boating Season Officers Should Be Increased (Continued)

equipment purchases in the past have allowed the Marine Patrol to safely perform their duties. Nevertheless, the Department has sought an increase in funding through current legislation.

With regard to the issue of radios, because of past budget constraints, the Marine Patrol has not been able to purchase portable radios for all officers and install permanent radios in all field boats. With the help of a Coast Guard grant, and additional revenue expected next year, portable radios will be issued for the 1998 season, and permanent radios will be installed in all boats before the 1999 season. In addition, State funds have been allocated to the State Police for the installation of a new interdepartmental communications system. This system will be on-line in 1998, and it will allow all law enforcement agencies, including the Marine Patrol, to communicate with each other. This does not occur at the present time. This system will be extremely beneficial to all Marine Patrol officers, as it will substantially increase interdepartmental cooperation, availability and response.

Finally, the Department does not believe that it is accurate to estimate that 30% of calls for service went unanswered. In the report, it is stated that data limitations prevented a determination of how many calls went unanswered. Thus, there is no way of confirming the estimate provided. Moreover, there is no indication of the reason why any specific call went unanswered, and there is no information identifying the type of call or the time and place of the call. Moreover, the Department has not received complaints from the public concerning the issue of unanswered calls for service. Without this information, it is difficult to adequately address this issue. Nevertheless, the enhanced coverage contemplated in the recommendation will alleviate much of this concern.

2.2 Full-Time Permanent Marine Patrol Officers

As reported earlier, the Marine Patrol employs four full-time permanent uniformed officers: a captain, a lieutenant, and two sergeants. The captain has overall responsibility for supervising day to day operations of the Marine Patrol. The captain's responsibilities also include holding public hearings for the agency, interacting with other law enforcement agencies in covert and normal operations, and analyzing and interpreting boating laws and recommending methods for improving public safety and protection. The lieutenant's responsibilities include: supervising the sergeants, maintenance mechanics, and dispatch personnel; reviewing and recommending changes to proposed legislative actions, rules, and State policies; monitoring and assigning maintenance and repairs of State-owned boats; and receiving permit applications for swim lines and water events. The two sergeants supervise boating season supervisors and patrol officers and share several

2. MARINE PATROL STAFFING (Continued)

2.2 Full-Time Permanent Marine Patrol Officers (Continued)

responsibilities with the lieutenant. All three occasionally are required to work patrol shifts due to the lack of officers for coverage and are on call year round. They rotate every two weeks as to who is the primary person to contact for call outs. If the call out involves a reported fatality, the captain also responds.

Other shared responsibilities among the full-time officers include:

- Enforcing boating and navigation laws;
- Investigating and reconstructing boating accidents;
- Investigating drownings;
- Developing and teaching boating education programs;
- Issuing arrest warrants;
- Preparing for and prosecuting court cases;
- Generating statistical, financial and progress reports;
- Reviewing and recommending requests for navigational aids;
- Coordinating the removal and placement of navigational aids;
- Reviewing reports and paperwork submitted by boating season Marine Patrol officers;
- Developing the Marine Patrol classroom training for new hires; and
- Hiring and training new boating season officers.

Full-time officers engage in various aspects of their jobs depending on the time of year. During the peak boating season, which runs from mid-June until Labor Day weekend, full-time officers spend their time supervising boating season officers, either directly, through paperwork, or by telephone. The lieutenant and two sergeants are responsible for providing supervision to boating season officers throughout the State. Insufficient supervision of Marine Patrol officers was identified as a problem by both full-time Marine Patrol officers as well as the boating season officers.

The majority of court cases arising from the previous boating season occur during the fall and winter months, and the full-time officers are responsible for prosecuting the majority of these. In addition, the full-time officers recruit and hire new boating season officers, coordinate removal of navigational aids, and purchase equipment. Because of demands during the boating season, full-time officers are generally expected to take their vacations and complete any training during the fall and winter months.

The full-time officers develop and schedule the Marine Patrol classroom training and on-the-water training during the winter months. In late winter or early spring, when new hires complete their training at New Hampshire Police Standards and Training Academy, full-time officers begin the Marine Patrol portion of the training that lasts until late May or early June. During this time period, full-time officers are also responsible for coordinating placement of navigational aids, organizing veteran officer training, and generally ensuring everything is ready for the boating season.

2. MARINE PATROL STAFFING (Continued)

2.2 Full-Time Permanent Marine Patrol Officers (Continued)

Observation No. 2

Additional Full-Time Marine Patrol Officers Needed

All four of the full-time permanent Marine Patrol officers incur overtime hours before, during, and after the peak boating season.

While some of the captain's overtime is due to being called out for accidents and other boating-related events, the majority is due to public hearings on restricted bodies of water. The captain represents the Marine Patrol at hearings related to jet skis, power boats, rafting of boats, and other restricted activities. By statute these hearings occur from June through September. The captain reported attending 10 or 11 hearings during 1997 and incurred a total of 272 overtime hours for these hearings and other responsibilities.

The three remaining full-time Marine Patrol officers worked an average of 222 hours overtime each during calendar year 1997 and 200 hours in calendar year 1996. Overtime was incurred due to call outs for accidents, patrol coverage on weekend nights, and training new officers. Overtime on weekend nights was often related to an accident or other event which required a supervisory presence. With only four full-time officers, including the captain available to cover all possible shifts, accidents, and other call out events necessarily resulted in overtime. During 1997, there were 69 boating accidents and six fatalities investigated by the Marine Patrol.

Information obtained from the New Hampshire State Police indicated overtime for troopers assigned to patrol activities averaged 53 hours per trooper during calendar 1997. In addition, information obtained from the City of Concord, Department of Police, indicated overtime for its patrol bureau during the 33-week period from June 1997 through February 1998, averaged four hours per officer per week, or approximately 230 hours annualized per officer. Concord Police also reported having as many as five vacancies in the patrol bureau during this time period.

The Commission on Accreditation of Law Enforcement Agencies recommends 12 officers per supervisor as the maximum for supervision. During 1997, the Marine Patrol lieutenant supervised the three maintenance personnel and 15 patrol officers on lakes Winnepesaukee and Winnisquam, one sergeant supervised 11 patrol officers in Rockingham County and along the seacoast, and the other sergeant supervised 24 patrol officers throughout the remainder of the State. The hiring of one additional sergeant would provide for closer supervision of the 24 patrol officers that are assigned to eight patrol areas throughout the State.

Telephone surveys of boating season Marine Patrol officers, as well as interviews with full-time permanent officers, indicated supervision was inadequate due to constraints upon supervisors' time. According to Marine Patrol personnel insufficient full-time permanent officers means background investigations of new Marine Patrol recruits are not done in a timely manner, administrative rules are not updated as needed, and boater education classes are not keeping up with the demand.

2. MARINE PATROL STAFFING (Continued)

2.2 Full-Time Permanent Marine Patrol Officers (Continued)

Observation No. 2: Additional Full-Time Marine Patrol Officers Needed (Continued)

With the current workload and responsibilities of the full-time permanent officers we believe an additional officer is needed. This will help to reduce overtime, alleviate the excessive supervisory span of control, provide for additional boating education courses, and improve the effectiveness with which the Marine Patrol hires and trains new personnel. We have provided a cost estimate in Appendix A for the hiring of an additional full-time officer based on current salary levels.

RECOMMENDATION:

We recommend the Department of Safety, Division of Safety Services hire one additional full-time permanent Marine Patrol officer at the rank of sergeant. If additional boating season Marine Patrol officers are hired according to our Observation No. 1, we recommend that a second full-time permanent Marine Patrol officer at the rank of sergeant be hired. (Our estimate of the personnel cost for this recommendation appears in Appendix A.)

AUDITEE RESPONSE:

We concur in part with the recommendation that one or two permanent Marine Patrol officers, at the rank of sergeant, be hired. Should the Legislature choose to make additional funding available to the Marine Patrol, the Department would support hiring additional full-time permanent Marine Patrol officers. However, under current funding limitations the Department cannot agree to hiring additional personnel. Rather, the Department proposes to make resources from other divisions available to support certain Marine Patrol functions. For example, regarding public hearings on restricted bodies of water the Division of Safety Services Director can cover these hearings, or one of the Department's attorneys, if he is unavailable. This will also save on overtime pay for supervisors.

The Department does not agree that the recommendation of the Commission on Accreditation of Law Enforcement Agencies is applicable to the Marine Patrol where the vast majority of functions and services are performed during the summer months only. However, under the enhanced coverage contemplated in Observation No. 1, the Department does agree that two more supervisors are probably required during the boating season. This would increase the supervisors to seven. These supervisors can work for Marine Patrol during the spring and summer months, and then for the State Police during the fall and winter months. In fact, several years ago, positions numbered 18726 and 18727 were two highway enforcement officers who worked as Marine Patrol supervisors during the boating season. These positions were eliminated and those highway enforcement officers are now full-time State Police officers. We need to re-establish these two positions.

2. MARINE PATROL STAFFING (Continued)

2.2 Full-Time Permanent Marine Patrol Officers (Continued)

Observation No. 2: Additional Full-Time Marine Patrol Officers Needed (Continued)

Additionally, the Department believes that the State Police, or management, are fully capable of assisting the supervisors with background investigations of new marine patrol recruits, and the Department's lawyers are fully capable of ensuring that administrative rules are updated.

2.3 Navigation Maintenance Mechanics

The Marine Patrol Bureau employs two navigation maintenance mechanics and one navigation maintenance mechanic foreman. Maintenance personnel are responsible for: repair and maintenance on patrol boats, motors, and trailers; minor maintenance on land vehicles; maintaining and replacing navigational aids; transporting boats throughout the State; installing radios and all electrical work on boats; rebuilding engines; maintenance at the Marine Patrol headquarters building, including plowing; building inventory; and painting the approximately 3,000 wooden spar buoys placed by the Marine Patrol Bureau. Maintenance personnel estimated boat-related maintenance requires the majority of their time, followed by buoy work, and miscellaneous items such as calls for service, building and vehicle maintenance, hauling boats, special details, and securing accident sites.

Maintenance personnel reported they frequently travel to the seacoast and other parts of the State to perform repairs to boats, motors, and trailers. Although estimates varied, all three maintenance mechanics indicated travel to the coast occurred most frequently. Likewise maintenance personnel agreed that they travel three to five days each week for repair purposes. Whenever possible maintenance personnel ask that officers with pull boats bring their crafts to Marine Patrol headquarters to insure that necessary parts and tools are readily available.

Observation No. 3

Additional Maintenance Personnel May Be Needed

Our telephone survey of boating season Marine Patrol officers indicated a high level of satisfaction with the sufficiency of the maintenance support they received. However, 35.5 percent of the boating season officers indicated there was a need for additional maintenance personnel, as did Marine Patrol management.

Maintenance personnel stated that an additional full-time permanent employee was needed. Maintenance personnel indicated that the additional employee need not be another navigation maintenance mechanic. Instead, maintenance personnel reported a need for someone to help out with buoy and signal repair and painting, as well as cleaning, painting, and waxing boats as they are prepared for storage.

2. MARINE PATROL STAFFING (Continued)

2.3 Navigation Maintenance Mechanics (Continued)

Observation No. 3: Additional Maintenance Personnel May Be Needed (Continued)

Maintenance personnel reported that logs are kept of maintenance and repairs on boats, motors, trailers, and vehicles. However, our review of the logs found them insufficient for determining the amount of time spent on maintenance and repair activities, as no record was made of the time required to perform these activities. In addition, our review of the logs revealed that not all years were fully represented, nor were simple maintenance activities such as oil changes logged.

Our analysis indicates that maintenance personnel responded to at least 1,107 of the 7,377 (15.0 percent) calls for service from 1995 to 1997, primarily for missing, broken, or drifting buoys. However, maintenance may have responded to more than the 1,107 calls. Marine Patrol data regarding who actually responded to and resolved a call for service were not always available, some responses by maintenance personnel may not have been recorded.

The need for additional maintenance personnel would be supported by our Observation No. 1, which recommends additional boating season Marine Patrol officers. If the Marine Patrol Bureau does hire additional officers, the workload on the maintenance personnel would necessarily increase. However, without sufficient usable data from maintenance repair logs, at this time we are unable to state with certainty that additional maintenance personnel are needed to perform maintenance activities.

RECOMMENDATION:

If additional boating season Marine Patrol officers are hired according to our Observation No. 1, we recommend the Department of Safety, Division of Safety Services, hire at least one additional navigation maintenance mechanic. We also recommend that maintenance personnel begin to record the amount of time taken to perform repairs and maintenance on Marine Patrol equipment, including travel time necessary to perform repairs and maintenance in the field. (Our estimate of the personnel cost for one navigation maintenance mechanic appears in Appendix A.)

AUDITEE RESPONSE:

We concur in part with the recommendation that the Department should hire an additional navigation maintenance mechanic under the enhanced coverage contemplated by Observation No. 1. Should the Legislature choose to make additional funding available to the Marine Patrol, the Department would support hiring an additional full-time maintenance mechanic. Under current funding levels the Department cannot agree to hiring additional personnel, but will instead seek alternative methods of addressing maintenance issues.

2. MARINE PATROL STAFFING (Continued)

2.3 Navigation Maintenance Mechanics (Continued)

Observation No. 3: Additional Maintenance Personnel May Be Needed (Continued)

The Department has increased the marine maintenance employees to 40 hour weeks year round. This should help to correct many of the current problems due to repairs and maintenance. The hiring of an additional navigation maintenance mechanic will not solve the problem of delayed service. The Department also proposes that, during the boating season, contracts should be established with marinas, and other boating repair facilities, to repair our boats in the field when needed. These contracts can be entered into with businesses that are located in close proximity to bodies of water patrolled in areas outside the lakes region. This would cut down on the demands of the current maintenance personnel at the Marine Patrol headquarters, and it will also increase the accessibility of their services. Additionally, we may want to consider a similar contract with marine dealers on lakes to repair buoys if needed. If this contract proposal becomes too costly, the Department would consider the proposal to hire an additional navigation mechanic, but there needs to be a system in place to cut down on the travel time needed to repair boats.

STATE OF NEW HAMPSHIRE MARINE PATROL BUREAU STAFFING

3. OTHER ISSUES AND CONCERNS

In this section we present issues we encountered during our audit which were not developed into formal observations. While these issues are outside the scope of our present audit, we do consider them noteworthy. The Department of Safety and the Legislature may consider these issues and concerns deserving of action or further study; therefore we have included suggestions where appropriate.

3.1 Radio Communications Should Be Improved

There is no statewide two-way radio communication system for Marine Patrol officers. Some Marine Patrol officers lack necessary equipment to send and receive radio messages. During the 1997 boating season, the Marine Patrol had only 26 two-way radios assigned to its patrol officers. The effective range of these two-way radios is limited by geography to lakes Winnepesaukee, Winnisquam, and parts of Squam and Sunapee. Marine Patrol management reported some officers purchased their own two-way radios or have been loaned radios by local law enforcement agencies in order to communicate with colleagues in their local patrol areas.

During our audit period, the Marine Patrol used a radio frequency which no other law enforcement agency in the State used. Because the Marine Patrol used this special frequency, those officers assigned radios were unable to directly communicate with local or State law enforcement personnel who may have been in their areas.

Marine Patrol officers who work in the field or are available for "call outs" are assigned alphanumeric pagers. Marine Patrol dispatchers send call information to officers through these pagers. Using the pager, dispatchers type a short coded message to the officer giving a brief description of the problem and the location. If any additional information is required, the officer must locate a public or private phone on shore to call headquarters for details. A Marine Patrol manager stated there have been instances where an officer has received a page and left the lake to call headquarters only to find the call was for the lake just vacated. This wastes time and reduces emergency responsiveness. Another drawback to the pagers is dispatchers have no way of knowing if the officer received the message or is able to respond to it.

Marine Patrol management reported that, although initially cut from the system, they will become fully integrated with the statewide State Police communication network currently being implemented. This radio system will provide statewide communications for State Police, Fish and Game officers, Liquor Investigators, and Marine Patrol officers as well as some local law enforcement authorities.

3. OTHER ISSUES AND CONCERNS (Continued)

3.1 Radio Communications Should Be Improved (Continued)

We suggest the Department of Safety continue to work toward providing appropriate communications for its Marine Patrol officers. This would increase response to calls for service, enhance public and officer safety, and improve the Marine Patrol's ability to direct the activities of its officers.

AUDITEE RESPONSE:

We concur with this recommendation and the Department is already working towards improving radio communications, as mentioned in its response to Observation No. 1.

3.2 Role Of The Marine Patrol Auxiliary

RSA 270:12-c enables the Safety commissioner to establish an auxiliary Marine Patrol staffed by either paid, part-time employees or volunteers to assist the Marine Patrol in carrying out its duties. Marine Patrol Auxiliary members do not have arrest powers according to statute, nor do they have the ability to issue citations. During the 1997 boating season, the Marine Patrol Auxiliary consisted of about 25 volunteers who patrolled their local lakes and reported infractions to the Marine Patrol. Each member of the Marine Patrol Auxiliary is requested to spend a minimum of four hours per week on the water. Some Marine Patrol personnel suggested this presence of auxiliary officers on the water deters violations. Auxiliary members also conduct courtesy inspections. Auxiliary members are issued a placard for their boat and a shirt identifying them as a Marine Patrol Auxiliary officer. They must use their own boats and pay for their own gas.

A Marine Patrol boating season supervisor is assigned as a liaison to the Marine Patrol Auxiliary. The liaison officer deals directly with the Marine Patrol captain on auxiliary issues.

We believe more could be done with the Marine Patrol Auxiliary. For example, Marine Patrol management reported being unable to meet the demand for boater education courses. Boater education courses are provided monthly at the Marine Patrol headquarters in Gilford and at St. Joseph's Hospital in Nashua. Additional classes are offered in Gilford during the boating season. However, Marine Patrol management reported there still is a waiting list for education courses. Management also acknowledged boater education courses taught by Marine Patrol officers take officers away from patrol duties.

Marine Patrol management was uncertain whether the auxiliary was up to the task of teaching boater education classes. A representative of a lake association stated boater education does not need to be the sole province of the Marine Patrol; rather it could be provided by the auxiliary. We believe the Marine Patrol Auxiliary, with proper training and supervision should be able to take on a greater role in providing boater education courses throughout the State.

3. OTHER ISSUES AND CONCERNS (Continued)

3.2 Role Of The Marine Patrol Auxiliary (Continued)

In addition to teaching boater education courses, the Marine Patrol Auxiliary could assist the Marine Patrol in other areas. For example, Marine Patrol management reported turning down requests for speaking engagements at schools and civic groups due to lack of time. Properly trained and supervised auxiliary members could provide this service, as well as helping to represent the Marine Patrol at boat and outdoor shows throughout the State. Another interested party we spoke with stated the auxiliary could be used to check mooring registration decals.

We suggest the Marine Patrol develop a more suitable role for the auxiliary.

AUDITEE RESPONSE:

We concur with this recommendation and the Department is already working towards adding the number of Marine Patrol Auxiliary, as mentioned in its response to Observation No. 1. Additionally, we currently use Marine Patrol Auxiliaries to check mooring decals on the bodies of water where they are regulated. Also, we have tried to single out those Auxiliaries who, either by training or experience, are qualified to teach boating education classes.

3.3 Develop The Mission And Goals Of The Marine Patrol

During the course of our audit, we observed that the focus of the Marine Patrol is not well defined. We found no mission statement or goals for the Marine Patrol. Management stated the last time long term goals had been developed for the Marine Patrol was in 1976.

We suggest a mission statement and goals be developed for the State's Marine Patrol function by involving affected Department employees at all levels.

AUDITEE RESPONSE:

We concur with this recommendation. A mission and goal statement has already been prepared.

3.4 Improve Record Keeping And Data Collection

We discovered numerous instances of incomplete Marine Patrol records during the course of our audit. Without a great deal of data manipulation and cleaning we would have found it difficult or impossible to gain a full understanding of Marine Patrol activities. We question management's ability to make informed decisions without improvements in its data entry and handling procedures.

In attempting to determine the demand for Marine Patrol services we examined data maintained by the Marine Patrol in a database called StreetGuard. This database records calls for service information from the public as well as enforcement information. Marine Patrol management stated that only 75 to 80

3. OTHER ISSUES AND CONCERNS (Continued)

3.4 Improve Record Keeping And Data Collection (Continued)

percent of all calls for service are received by headquarters because officers sometimes receive complaints in the field and do not notify headquarters. Our examination of electronic calls for service data found that several hundred records were missing for 1996. Marine Patrol staff was unable to locate paper copies of these calls. Paper copies and electronic records for calls for service for 1995 were also incomplete. The Marine Patrol also reported some inaccuracies in the call for service data is caused by officers requesting a call for service number from headquarters but not providing the necessary information for keying the call for service into the computer. Dispatchers may also have inadvertently skipped over a number when recording a call for service, making the total number of calls for service appear higher than the actual number.

Accurate accounting of calls for service is important because it helps determine the demand for Marine Patrol services by the public. The Marine Patrol should maintain all paper records and reconcile these with the electronic records to ensure they are complete. The Marine Patrol should also strive to ensure all calls for service are recorded.

Patrol logs are completed by each officer for every shift worked. Patrol logs record encounters with the public, activities undertaken, and location of patrol activities. Logs also record the times officers start and end their shifts and equipment problems or concerns. Many of the patrol logs we reviewed were not filled out completely making it difficult for us to determine patrol activities and the amount of time taken to complete activities. There were also some instances where officers did not complete any patrol logs.

We also found numerous inconsistencies with coding used by officers to fill out patrol logs despite a standardized coding scheme written on the log as a reference. In some cases the patrol log indicated an officer issued a warning or summons but this information was not recorded in the StreetGuard database. There were also instances where the StreetGuard database contained warning or summons information but the information did not appear on the officer's patrol log. Patrol logs are important as a management tool because they provide management with a record of the activities engaged in by the officers, their locations, and the time taken to complete those activities. Supervisors should ensure officers use patrol logs correctly and consistently and provide training when necessary.

The Marine Patrol was unable to provide the number of hours officers spent on patrol or enforcement activities, in court, training, travel, or other duties. Prior to the 1997 boating season, officers were required to complete time sheets that recorded their activities. However, in 1997 the timekeeping system was simplified so officers could complete timekeeping duties quickly. This simplification resulted in a loss of important data that management could use to determine time spent on various tasks such as patrol, travel, or training. Consequently, management does not have this information to use when making decisions.

3. OTHER ISSUES AND CONCERNS (Continued)

3.4 Improve Record Keeping And Data Collection (Continued)

We suggest the Marine Patrol assess and improve its data gathering, entry, and quality control procedures.

AUDITEE RESPONSE:

We concur with this recommendation.

3.5 Seek Reimbursement For Repairs Made Under Warranty

During interviews with Marine Patrol personnel it was reported that motor repairs are performed by Marine Patrol navigation maintenance mechanics despite the motors being under warranty. A major outboard motor manufacturer refuses to reimburse the Marine Patrol for the cost of labor for repairs made to motors still under warranty. The cost of parts is covered by the manufacturer. The Marine Patrol has opted to fix these motors in-house rather than send the motor to an authorized repair facility where no cost to the State would be incurred. According to Marine Patrol personnel, the manufacturer will not reimburse the Marine Patrol for labor costs incurred for warranty repairs because it is not an authorized dealer. Marine Patrol navigation maintenance mechanics have attended the manufacturer's motor repair classes. A different manufacturer of inboard motors reimburses the Marine Patrol for parts and labor related to repairs of their motors under warranty.

While it may be economically justifiable in some instances to repair minor mechanical problems that would normally be covered under warranty, the Marine Patrol should attempt to minimize its own labor costs by sending major warranty repairs to an authorized repair shop. We suggest Marine Patrol management seek reimbursement from the manufacturer for labor costs incurred for work performed on warranty items.

AUDITEE RESPONSE:

Marine Patrol has recently received approval and written confirmation of warranty status for its shop with Outboard Marine Corporation. Rather than receiving monetary reimbursement, the state will receive a credit equal to the amount of the authorized tasks flat rate and can use this towards parts ordered.

3.6 High Employee Turnover

Marine Patrol management is concerned with the turnover of its boating season officers. They report the bulk of officers leave within a short time period for other law enforcement jobs. One member of management stated the Marine Patrol is fortunate to retain boating season officers for two seasons. This individual also stated some boating season officers use the Marine Patrol as a stepping stone to other law enforcement jobs. These other positions are attractive to boating season officers because they offer more money, provide benefits, more equipment, and

3. OTHER ISSUES AND CONCERNS (Continued)

3.6 High Employee Turnover (Continued)

better work schedules according to Marine Patrol management. During the 1997 boating season new officers were paid \$8.46 per hour.

A survey of Marine Patrol officers conducted in 1996 by the Department of Safety, Division of Administration found the top five reasons given by officers for not returning to the Marine Patrol are: 1) being unarmed; 2) no radio; 3) poor management; 4) no benefits; and 5) low pay. As a result, a great deal of resources go into recruiting and training new officers every year. One Marine Patrol manager estimated one-third of the Marine Patrol's budget is spent on training and outfitting new officers each year.

The turnover problem is not limited to boating season officers, however. A Marine Patrol manager told us the Marine Patrol had to hire all new dispatchers for the 1997 boating season because the four people who had been dispatching quit due to financial reasons.

Members of the public have also recognized the employee turnover issue. A representative of a lake association and another interested party both told us of the high turnover problem and linked it to better pay and equipment offered by other organizations.

The inability of the Marine Patrol to field an experienced staff inhibits the progress of the agency at every level. A Marine Patrol manager reported there are not enough field training officers because of high turnover. This individual also stated that turnover affects supervision because supervisors have to spend a great deal of time with trainees at the expense of more seasoned officers.

We suggest the Department of Safety consider ways to reduce turnover among boating season officers. We suggest the agency look at the pay scale and other inducements for retaining employees it has spent considerable time and resources to train.

AUDITEE RESPONSE:

We concur that this issue continues to be a problem. The Department's efforts to increase the seasonal employees rate of pay, the anticipated reduction in the number of training hours, and the improvements in our communication system will assist us in retaining seasonal employees.

3.7 Appropriate And Necessary Equipment Should Be Identified And Purchased

During our audit we received comments regarding the need for additional equipment, and the appropriateness and reliability of existing Marine Patrol equipment. Some equipment needs such as radios have been addressed previously in this section. In many cases management concurs with boating season officers

3. OTHER ISSUES AND CONCERNS (Continued)

3.7 Appropriate And Necessary Equipment Should Be Identified And Purchased (Continued)

regarding the lack of equipment. Approximately one-third of the boating season officers we spoke to in our telephone survey rated Marine Patrol equipment as poor.

Boating season officers and maintenance personnel told us that equipment breakdowns sometimes kept officers from patrol. Several boating season officers stated some of the boats or motors assigned to them were old or had significant mechanical problems. One officer stated his boat broke down every eight to ten days which kept him off the water until maintenance could fix the problem. A mechanic stated some boats have difficulty completing an eight hour shift without needing repair. Other officers reported the boats and motors they were assigned were well maintained.

Maintenance personnel reported boat propellers are replaced frequently yet boats are not outfitted with spare propellers. Likewise boat trailers are not equipped with spare tires. Officers must call a mechanic at headquarters to come change the tire if a trailer gets a flat. We suggest all trailers have a spare tire and boats have spare propellers so officers can replace the item as needed rather than having to wait for maintenance personnel to travel to the location to render assistance. We also suggest officers receive instruction from maintenance personnel regarding the proper procedures for changing trailer tires and outboard propellers.

The Marine Patrol supplies the following items as standard equipment: two uniforms, badge, baseball style hat, uniform life jacket, rain gear, name tag, hand cuffs, baton and pepper spray, pager, and latex gloves. Many complaints focused on the need for items such as utility belts, shoes and boots, warm jackets, binoculars, larger first aid kits, and safety equipment such as survival suits for cold water immersion, body armor, and firearms. Prior to the 1997 boating season, Marine Patrol management purchased new uniforms and pepper spray for its officers to address some of their concerns. We suggest the Marine Patrol review its standard equipment issue and consider adding additional items such as utility belts and safety equipment.

AUDITEE RESPONSE:

As already mentioned, because of insufficient funding in the past, we have been forced to use innovative and creative methods to repair the boats. The high incidence of repair and maintenance can be directly attributed to the aging nature of some of the boats in the field. If additional funds are allocated next year, under current legislation, the appropriation of funds for our boats and related equipment will be increased.

To the extent that the recommendation for increased equipment includes the issuance of firearms, the Department does not concur that Marine Patrol officers should possess firearms. Patrols on the lakes are a service to the people who use the lakes. Marine Patrol officers should preserve and protect the enjoyment and safety of those

3. OTHER ISSUES AND CONCERNS (Continued)

3.7 Appropriate And Necessary Equipment Should Be Identified And Purchased (Continued)

using the lakes, by patrolling the waterways and enforcing boating laws. It is not necessary for the officers to possess weapons in order to serve this purpose. Moreover, if Marine Patrol officers were allowed to possess firearms, the hours of required training would substantially increase, including yearly certification.

3.8 Investigation Of Boat Thefts

According to management, the Marine Patrol does not investigate boat thefts. The Marine Patrol received a list of stolen boats dated October 3, 1997 from the Massachusetts Environmental Police, Marine Theft Bureau. This "hot sheet" listed 103 vessels registered in New Hampshire and contains the date the boat was stolen, hull identification number, registration number, vessel manufacturer and date manufactured, length, color, and owners name. Marine Patrol personnel randomly selected a sample of boats listed on the "hot sheet" and compared this information to its StreetGuard database and found three of the boats listed on the "hot sheet" had been stopped during the boating season. The Marine Patrol headquarters has access to New Hampshire State Police records through the State Police On-Line Terminal System (SPOTS) which provides registration and other information. However, most officers do not have the capability to communicate with headquarters, so officers are unable to routinely check to see if boats they stop are stolen.

Marine Patrol management also stated New Hampshire is one of 21 states nationwide which does not require titles to be presented when registering a boat. As a result, stolen boats reportedly end up in these states because no title is required. In New England, Massachusetts, Rhode Island, and Vermont require a title to vessels before a boat can be registered.

We suggest the Marine Patrol improve its ability to determine whether a boat is stolen during a boat stop and take appropriate action to recover stolen boats.

AUDITEE RESPONSE:

We concur with this recommendation and offer our response to Observation No. 1 as a way of investigating more boating thefts.

3.9 Location Of Navigational Aids Should Be Recorded

The Marine Patrol has no record of the location of its navigational aids in State waters. Navigational aids, such as buoys and lights, mark submerged hazards or channels for boaters. Proper placement of navigational aids can be critical in keeping boaters from running aground or damaging their vessels on hidden submerged hazards. It has been estimated the Marine Patrol is responsible for approximately 3,000 navigational aids. Each spring Marine Patrol boating season officers and navigation maintenance mechanics place navigational aids and remove them in the fall. The Marine Patrol relies on the individual memories of its staff to

3. OTHER ISSUES AND CONCERNS (Continued)

3.9 Location Of Navigational Aids Should Be Recorded (Continued)

properly place aids each year. This practice may be detrimental to the State's navigation placement program given the Marine Patrol's employee turnover.

In our telephone survey of boating season officers, several respondents stated they had difficulty placing the navigational aids in their proper position due to lack of accurate information. Officers also stated they could place the aids quicker if they know exactly where they need to be placed. Consequently, we suggest the Marine Patrol accurately chart the proper locations of all navigational aids on patrolled waterways.

Another alternative may be to leave the navigational aids in the water year-round. This may be possible with new plastic buoys being used by the Marine Patrol which do not need painting each year as the older wooden aids do. Estimates for placing navigational aids ranged from one to two months and a similar amount of time to remove them. If feasible, this option would also save the time and expense of placing and removing the aids each year.

AUDITEE RESPONSE:

We concur in part with this recommendation, as we are currently moving toward creating an inventory of charts with navigational aid placement information. Last year we purchased a global positioning system instrument to accurately identify navigational aid placements. We do not concur that no record exists of navigational aid placements. Although some records are not reliable given today's technologies, the location of navigational aids is a multi-year task. We are hopeful that within the next three to five years we will have completed the charting of nearly all of the State's bodies of water. Additional staffing and funding will expedite this process.

3.10 Inconsistencies With Timesheets For Full-Time Permanent Personnel

Our analysis of the hours worked by the full-time permanent Marine Patrol staff involved reviewing timesheets for a three-year period. During this review we observed a number of inconsistencies. First, it appeared timesheets for some personnel were regularly filled out by someone other than themselves. Although the submitted timesheet appeared to be signed by the person whose name was on the sheet, the name at the top of the form, as well as the dates and hours worked each day, appeared to be in different handwriting. The same handwriting often appeared on the timesheets of more than one person.

While we do not have reason to question whether the hours which were submitted were actually worked, we do question the need to have, and the propriety of, someone other than an employee filling out his or her own timesheet. We strongly suggest all Marine Patrol employees be responsible for only their own timesheets.

3. OTHER ISSUES AND CONCERNS (Continued)

3.10 Inconsistencies With Timesheets For Full-Time Permanent Personnel (Continued)

Second, information from timesheets is copied to a single form that is submitted to the Department of Safety, Division of Administration, for payroll processing. During our review we observed the information on the timesheets differed at times from the information on the form submitted for payroll. When this was observed we questioned for clarification either the employee whose timesheet was in question or the employee who had copied the information to the payroll form. While all variances were satisfactorily addressed, we suggest inconsistencies between the timesheet and the payroll form be corrected and initialed on both documents.

Third, we also observed that timesheets could not be located for some pay periods. Despite this, the payroll form still had information regarding the hours worked by the employee. In most instances we found the missing timesheets with those from a succeeding pay period, while in other cases we never located the missing timesheets. We suggest supporting documentation, namely timesheets, for all hours worked that are submitted to payroll be received prior to the payroll form being filled out and submitted to the Division of Administration.

AUDITEE RESPONSE:

We concur that the inconsistencies with time sheets for full-time permanent personnel is an issue that needs to be addressed.

STATE OF NEW HAMPSHIRE MARINE PATROL BUREAU STAFFING

4. CONCLUSION

The Marine Patrol Bureau provides a necessary and desired function for the State. Representatives from the statewide New Hampshire Lakes Association, and other individual lakes associations voiced their concerns to us regarding the level of coverage the Marine Patrol provides. Unfortunately, neither these representatives nor our contacts with professional law enforcement, including boating law enforcement, associations could provide any standard procedures for calculating how many officers equals minimal coverage.

Our own analysis indicates a need exists for greater presence by the Marine Patrol on New Hampshire waterways. Judging from the number of boats registered in the State, the Marine Patrol's calls for service, and the patrol activity logs from individual officers, there is considerable activity on New Hampshire's waterways during the boating season, as well as throughout much of the year. First, patrol activity should be increased particularly during the peak boating months from June through August. Second, even at current patrol levels there is sufficient evidence to support the addition of one full-time permanent Marine Patrol Officer. Third, although we were unable to conduct sufficient analysis of work activity for maintenance personnel, adding more seasonal patrol officers will mean the addition of more watercraft and necessarily increase maintenance and repair activities to the point where another mechanic is needed.

While we were not directed to look at any issues other than staffing, during our fieldwork we nonetheless observed a number of conditions and activities which gave us cause for concern regarding Marine Patrol Bureau operations. These concerns should be addressed by Marine Patrol management.

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APPENDIX A

Estimated Cost Of Recommended Additional Personnel

Total Estimated Costs for Basic and Enhanced Coverage

Additional Positions	Basic Coverage	Enhanced Coverage
Boating Season Officers (Obs. No. 1)	\$127,344	\$284,932
Full-Time Permanent Officers (Obs. No. 2)	95,636	95,636
Navigation Maintenance Mechanic (Obs. No. 3)	30,735	30,735
Total Cost	\$253,715	\$411,303

Observation No. 1 - Boating Season Marine Patrol Officers

At a total cost per officer of \$7,959, as shown below, the cost to hire an additional 16 full-time equivalents as recommended in Observation No. 1 under Basic Coverage is estimated at **\$127,344**.

Similarly, the cost to hire an additional 35.8 full-time equivalents as recommended in Observation No. 1 under Enhanced Coverage is estimated at **\$284,932**.

During the 1997 boating season officers started at an hourly rate of \$8.46. Assuming 560 hours per boating season, the salary for one full-time equivalent is estimated at \$4,738.

Accordingly, estimated costs for a new boating season officer are as follows:

Salary for One Boating Season	\$ 4,738
Part-time officer school (100 hours)	846
Marine Patrol Classroom (100 hours)	846
Marine Patrol On the Water Training (50 hours)	423
Uniforms	725
Supplies (Batons, Pepper Spray, etc.)	207
Hepatitis B Vaccination	120
Pager Service (\$8.99 a month for 6 months)	54
Total Cost Per Officer	\$ 7,959

APPENDIX A (Continued)

Observation No. 2 - Full-Time Permanent Marine Patrol Officer

The cost to hire two additional full-time permanent Marine Patrol Officers at the rank of sergeant as recommended in Observation No.2 if additional boating season officers are hired is estimated at **\$95,636**.

The current annual cost associated with hiring one full-time officer includes:

Salary (Labor Grade 16)	\$29,052
Benefits (at 31% of salary)	9,006
Vehicle (Marine Patrol Equipped)	6,401*
Uniforms	2,445
Equipment	806
Pager Service (\$8.99 for 12 months)	108
<hr/> Total	<hr/> \$47,818

* Total cost for vehicle is \$32,003 with an estimated useful life of five years, the annual cost = \$6,401.

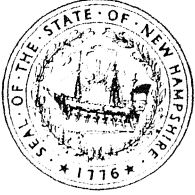
Marine Patrol management stated they have never hired a full-time individual who was not already working for the Marine Patrol as a boating season officer. If they were to hire an individual from outside the organization, additional training costs, as described for the boating season officers, would need to be included.

Observation No. 3 - Navigation Maintenance Mechanic

The cost to hire one additional full-time maintenance navigation mechanic is estimated at **\$30,735**, as shown below.

The current costs associated with hiring a full-time navigation maintenance mechanic include:

Salary (Labor Grade 13)	\$22,897
Benefits (at 31% of salary)	7,098
Uniforms	540
Tool Allowance	200
<hr/> Total	<hr/> \$30,735



State of New Hampshire

DEPARTMENT OF SAFETY
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RICHARD M. FLYNN
COMMISSIONER OF SAFETY

March 30, 1998

JOHN A. STEPHEN
ASSISTANT COMMISSIONER

Stephen P. Fox
Legislative Budget Assistance Office, Audit Division
107 North Main Street - Room 102
Concord, NH 03301-4906

RE: Departments Final Response to
Marine Patrol Staffing Performance Audit

Dear Steve:

Please find enclosed the Department's response to the Marine Patrol Staffing Performance Audit. It was a pleasure working with you and the Audit Division staff.

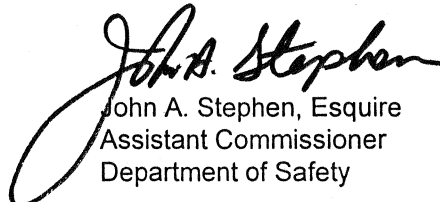
The Department would like to take this opportunity to thank the Division for its comments and recommendations. The staff has spent a great deal of time and effort critically analyzing the operation of the Marine Patrol. The information contained in the report will undoubtedly be of valuable assistance to the Legislature as it assesses the future needs of Marine Patrol.

Moreover, as you know, this Department is constantly evaluating ways to enhance coverage and promote safety. The report identified issues that will help us meet these goals in the future. Specifically, it identified the many hours of training that is now required before the seasonal officer is actually placed on duty. We need less classroom training and more practical on-the-water training.

The report also correctly identifies the need to have more Marine Patrol Auxiliaries and expand their responsibilities. Provided additional funding is available, and the Legislature agrees with the idea of revising the current training curriculum, we will be able to more adequately meet our responsibility to those who enjoy our beautiful lakes.

Once again, we would like to thank you for the insight you have provided to this agency.

Sincerely,


John A. Stephen, Esquire
Assistant Commissioner
Department of Safety

JAS/ees
h.stephen@letters.fox

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**PERFORMANCE AUDITS
ISSUED BY
OFFICE OF LEGISLATIVE BUDGET ASSISTANT**

<u>NAME OF REPORT</u>	<u>DATE</u>
<u>Review of the Indigent Defense Program</u>	January 1989
<u>Hazardous Waste Management Program</u>	June 1989
<u>Mental Health Services System</u>	January 1990
<u>Department of Administrative Services, Division of Plant and Property Management, State Procurement and Property Management Services</u>	June 1990
<u>Developmental Services System</u>	April 1991
<u>Prison Expansion</u>	April 1992
<u>Workers' Compensation Program for State Employees</u>	January 1993
<u>Child Settlement Program</u>	March 1993
<u>Property and Casualty Loss Control Program</u>	November 1993
<u>State Liquor Commission</u>	July 1994
<u>Managed Care Programs for Workers' Compensation</u>	November 1995
<u>Multiple DWI Offender Program</u>	December 1995
<u>Child Support Services</u>	December 1995
<u>Job Opportunities and Basic Skills Training Program</u>	May 1997
<u>Economic Development Programs</u>	October 1997
<u>Health Services Planning and Review Board</u>	January 1998

Copies of the above reports may be received by request from:

State of New Hampshire
Office of Legislative Budget Assistant
107 North Main Street, Room 102
Concord, New Hampshire 03301-4906
(603) 271-2785

