

World Maritime University

The Maritime Commons: Digital Repository of the World Maritime University

Maritime Safety & Environment Management
Dissertations

Maritime Safety & Environment Management

8-25-2013

Countermeasures on the development of volunteers in China's maritime search and rescue practice

Anfu Zhou

Follow this and additional works at: https://commons.wmu.se/msem_dissertations



Part of the [Social Work Commons](#)

Recommended Citation

Zhou, Anfu, "Countermeasures on the development of volunteers in China's maritime search and rescue practice" (2013). *Maritime Safety & Environment Management Dissertations*. 236.
https://commons.wmu.se/msem_dissertations/236

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for non-commercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact library@wmu.se.

WORLD MARITIME UNIVERSITY

Dalian, China

**COUNTERMEASURES ON THE DEVELOPMENT
OF VOLUNTEERS IN CHINA'S MARITIME
SEARCH AND RESCUE PRACTICE**

By

Zhou Anfu

China

A research paper submitted to the World Maritime University in partial
Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

(MARITIME SAFETY AND ENVIRONMENTAL MANAGEMENT)

2013

Declaration

I declare that all the materials in this dissertation which are not my own work have been properly cited, and abide by relevant academic formats.

The contents of this dissertation reflect my personal views, and are not necessarily endorsed by the University.

Signature: Zhou Anfu

Date: July 1, 2013

Supervised by: Zhu Yuzhu

Professor

Dalian Maritime University

Assessor:

Co-assessor:

Acknowledgments

This dissertation is submitted for the Master degree of 2012 Maritime Safety and Environmental Management which was held at Dalian Maritime University.

I would like to extend my thanks to the World Maritime University, Dalian Maritime University and Donghai Rescue Bureau for giving me the opportunity to learn through MSEM the 2013 courses. I have more profound understanding on maritime safety and environmental management.

I am extremely grateful to my adviser, Prof. Zhu Yuzhu for his encouragement and guidance. Prof. Zhu patiently provides me with valuable suggestions. Besides, I have learnt a lot from his rigorous study and profound knowledge.

I also want to express my deepest gratitude to all the professors who attended this 2013 MSEM programme. It was their tireless teachings that give me better understanding maritime management theories.

Title of Research paper: **Countermeasures on the Development of
Volunteers in China's Maritime Search and Rescue Practice**

Degree: **MSc**

Abstract

In 2008 China's first volunteer maritime search and rescue team was set up in Wenzhou. As countries gradually attach more and more importance to the construction of volunteer team, volunteers have become an important auxiliary force against crisis.

At present, all countries around the world pay more and more attention to the construction of maritime search and rescue volunteers. In the maritime emergency rescue operations in each country, a large number of voluntary organizations are involved. Setting up volunteers is not only an effective supplement of the professional rescue team, but also can save a professional search and rescue team from the growing cost; It can strengthen the construction of maritime emergency management and emergency ability, and is an important measure that can effectively make use of all kinds of maritime search and rescue resources.

This paper conducts the research from the following aspects:

First of all, it introduces the research background and significance of the study and summarizes timely foreign-related maritime search and rescue volunteers theories, and puts forward the research ideas and research methods.

Secondly, it explains the marine emergency search and rescue, rescue volunteers and core concepts, and introduces the failure theories and incentive theories in the paper.

Thirdly, the comparative analysis of maritime search and rescue volunteers system both at home and abroad is conducted. The author points out some existing problems in China's maritime search and rescue volunteers management and analyses the some prominent problems in the summary.

Finally, the author puts forward the corresponding countermeasures regarding the problems, and comes up with a framework of the China maritime search and rescue volunteer development. Then the full dissertation is summarized, followed by conclusion.

Keywords: volunteer, volunteer service, maritime search and rescue

CONTENTS

Declaration.....	i
Acknowledgments.....	ii
Abstract.....	iii
CONTENTS.....	v
Chapter I Introduction.....	1
1.1 Research background and research significance.....	1
1.1.1 The research background.....	1
1.1.2 Research significance.....	2
1.2 Literature review.....	4
1.2.1 The foreign research.....	4
1.2.2 The domestic research.....	5
1.3 Research ideas and research methods.....	7
Chapter II Related concepts and theoretical basis.....	10
2.1 Define related concepts.....	10
2.1.1 Emergency search and rescue at sea.....	10
2.1.2 The rescue volunteers.....	11
2.1.3 Voluntary service.....	11
2.1.4 Volunteerism.....	12
2.2 Theoretical foundation.....	13
2.2.1 Failure theory.....	13
2.2.2 Motivation theory.....	15
Chapter III Current volunteering situation of Maritime search and rescue.....	16
3.1 Features of maritime search and rescue volunteers.....	16
3.2 Construction and characteristics of developed countries' maritime search and rescue volunteers.....	17
3.2.1 Royal National Lifeboat Institution (RNLI).....	17
3.2.2 Japan Water Difficult Relief.....	18
3.2.3 The German Maritime Search and Rescue Service (DGzRS).....	18
3.2.4 The successful experience of Maritime Search and Rescue volunteers of developed countries.....	19
3.3 China Maritime Search and Rescue volunteers Situation and Features.....	21
3.3.1 Analysis about the current situation.....	21
3.3.2 Problems in China maritime search and rescue volunteers.....	23
3.4 Implications of China maritime search and rescue volunteers.....	25
Chapter IV Framework of China maritime search and rescue volunteers building.....	27
4.1 Maritime search and rescue volunteer organization.....	27
4.2 Maritime search and rescue volunteer program management.....	28
4.2.1 The basement of the plan.....	28

4.2.2 Content of program.....	28
4.3 Maritime search and rescue volunteer’s recruitment management.....	29
4.3.1 Search and rescue volunteer recruitment methods.....	30
4.3.2 The conditions of the search and rescue volunteer recruitment.....	30
4.3.3 The main groups of search and rescue volunteer recruitment.....	31
4.3.4 Search and rescue volunteer recruitment screening.....	31
4.4 The training management of maritime search and rescue volunteers.....	32
4.5 The use and management of maritime search and rescue volunteers.....	34
4.5.1 The use and management of professional search and rescue volunteers.....	34
4.5.2 The use and management of non-professional search and rescue volunteers.....	35
4.6 Stimulation mechanism of search and rescue volunteers.....	35
4.6.1 Classification of volunteers by the work initiative.....	35
4.6.2 Ways to stimulate volunteers.....	36
4.7 Maritime search and rescue volunteer organization and management of the funding.....	37
4.8 Recommended safeguards on maritime search and rescue volunteer system.....	38
CHAPTER V Conclusion.....	40
References.....	42

Chapter I Introduction

1.1 Research background and research significance

1.1.1 The research background

The global temperatures continue to increase, and the human survival environment is faced with all kinds of disasters and risks. Emergency volunteers, as an indispensable force to deal with emergencies, have become an international practice. Developed countries have formed emergency volunteers' network in case of earthquakes, fire or other disasters. Volunteer organizations and government participate together in the rescue and reconstruction activities, and become the main power in the disaster reduction and disaster relief. Also the enthusiasm of the masses to participate in volunteer activities abroad is very high; the volunteer experience has become a part of life. Most people will spend spare time to take part in certain kinds of emergency skill training. People prepared for emergency services at anytime and anywhere.

China is a country with enormous natural disasters and accidents. Every year, the number of deaths caused by accidents is about 200,000 people. For example, a total of 69,225 people died in the Wenchuan Earthquake in 2008 and Yushu Qinghai Earthquake in 2010 caused a number of 2,220 deaths. (Yuan, 2012a, P1)

It is significant for us to face the unexpected effects of these disasters. Our government has been playing an important role in the rescue, but the government's professional rescue power is limited. We need to learn from foreign experience and adjust our emergency management according to the specific situation in our country. Organized emergency volunteers can help to effectively reduce the casualties of

disasters, environmental destruction and property damage. They become one of the important rescue forces beyond the government enthusiasm in our volunteers in the rescue activities plays an important role. Of course in the specific relief work also exposed the inharmonic, professional volunteer activities, many problems such as blindness. At the same time volunteers in our country are not familiar with organizational form and the incentive mechanism.

Volunteering search and rescue of life at sea is an unpaid work. If there is no corresponding management mechanism, maritime search and rescue volunteers, and social forces participating in the rescue of consumption can only be borne by themselves and will be directly affected the enthusiasm they participate in the rescue work. Although social forces urge people to participate in rescue, but it is not compulsory legal liability, the current situation is part of the social forces escape in a variety of reasons obligation. Since always, the coordination of social forces to participate in the rescue work is heavily dependent on the management of the ship, will the government's maritime rescue responsibility onto social assistance force. Under market economy, this depends on the administrative command to supervise social forces to participate in rescue mode will become more and more difficult. So we need to learn from the experience of developed countries, give full play to the role of the volunteer in the rescue, improve the government's disaster prevention and mitigation capacity in China, social security, protect people's lives and property security, maintain the social sustainable development.

1.1.2 Research significance

In recent years, our country has developed gradually. The law of the People's Republic of China on the twelfth five-year plan for national economy and social development compendium 41st chapter in the third section puts forward "to strengthen the construction of emergency response team, establish a professional team as the basic force, with public security, armed police and the army as the backbone

and the assault force, experts, enterprises and institutions team and volunteers for the auxiliary power of emergency response team, improve life-saving ability". At the same time, some provinces and cities also issued relevant rules and regulations. In the Guangxi Zhuang Autonomous Region, maritime search and rescue regulations under subsection (2), article 25 of the regulations "to encourage and support relevant units to establish various forms of maritime search and rescue team". In article 10 of the regulations on the Jiangsu maritime search and rescue in the first paragraph (2) clear provides "encourage social forces organizations to establish water search and rescue volunteers, encourage water search and rescue ability of search and rescue units and individuals to water."

It can be seen that the development of the volunteers have intrinsic motivation on the development of our national economy and society, and can help to deepen reform of administrative system and further transform government functions. Therefore, building a solid but relatively stable, reasonable compensation, skills, emergency time to draw, maritime search and rescue well used volunteer team, strengthen social public maritime crisis consciousness education, make the professional and social forces form strong resultant force, let the whole society participate in the overall situation, it is imperative to make situation work in maritime accidents. In addition, the theory of maritime search and rescue volunteer research significantly lags behind the western developed countries. With various maritime emergencies occurring in recent years, volunteers have played a significant role in the rescue process, and have been praised by the society. This article attempts to show the maritime search and rescue volunteers' management issues for research, and fully tap the search and rescue volunteers the problems in the rescue. Using volunteer management experience of developed countries for reference, this article explores the method of the rescue volunteers of participating in emergency management in our country, and puts forward the feasible scheme in order improve the government's disaster prevention and mitigation capacity in China. In all, to vigorously develop China's maritime search and rescue team of volunteers, the volunteer management system of

China maritime search and rescue is a very important topic.

1.2 Literature review

1.2.1 The foreign research

At present, search and rescue volunteers' construction has become a problem that attracts more and more attention around the world, and disaster social assistance power has become an important part of the search and rescue system. Volunteer activities in the west have a long history due to traditional and religious traditions, where they have formed a strong volunteer service atmosphere. Besides, developed foreign countries attach great importance to the development of volunteer management activities. The study of volunteer activities began in the 1960s, and the management of the volunteer work is more systematic, completed, and organised.

Volunteers' motivation and satisfaction is one of the important factors of volunteer management, and also it has always been the hot topic of the academic research. (Chen & Liang, 2013, p.75). Fairley, Kellett and Green hold the opinion that volunteer motivation can be divided into the normative, utilitarianism and emotional type. The American scholar Joan E. Pynes conducted a comparative research between the public sector and non-profit organizations in the search and rescue volunteers recruitment, selection and training; Katherine and Susan explained how to recruit volunteers, how to assign volunteers work, and how to make each volunteer function in the organization's project. In addition, the team management and communication provides a useful plan. Steve and Rick talked about the volunteer work plan, organization, coordination, and how to inspire the volunteers' participation motivation, as well as the recruitment, selection, examination, maintenance and etc. They also talked about how to deal with the relationship between the volunteers and the full-time staff, and how to resolve conflicts between them. Volunteer organizations often neglect or have little experience on how to operate the content, from requirements analysis, program planning, job analysis, recruitment, interview, training, supervision and incentives to perform evaluation for detailed instructions.

Graham Cuskelly, Tracy Taylor and Russell Hoye and Simon Darcy think that researchers should jump out of the traditional research framework of volunteer motivation and satisfaction, and the effective human resource management is an important factor in volunteers' decision of long-term development. Human resource planning for volunteers' attraction is not big; the organizational structure design on different volunteer for retention and motivation of the role is different. Highly formalized practice of human resource management is not suitable for every volunteer organization. The environmental factors of the volunteer organization are the key to make effective decisions.

1.2.2 The domestic research

In China, many scholars are interested in the study of volunteer management and their works can be mainly represented by the following categories: Firstly, the study of volunteer management process. Wang from the volunteers recruited former design planning, daily management, is specialized in how to maintain the sustainability of volunteer activities and volunteer computing research etc. For nonprofits volunteer management, it can be comprehensively elaborated the basic knowledge; Jiang Xunqing argues that the nonprofit sector, enterprises, government can use volunteers to advocate the quantitative evaluation of volunteer service. Secondly, the research to the plight of volunteer service. Ding Yuanzhu argues that Chinese citizens' understanding of the volunteer service is far from enough and participation is not active. The relevant security system does not form a complete set, so more emphasis should be made through the project of management to properly handle the volunteer recruitment and training, evaluation and motivation. Thirdly, the volunteer service mode is studied. Han Yun's emergency rescue volunteers management mode and operation mechanism in China was studied, and the author points out that establishing emergency volunteer organizations and unified leadership command center, being serviceable at both peace time and wartime to emergency volunteers; Sun Hao thinks

that citizen's participation in the motivation of volunteers is diverse. The volunteer organization structure is arbitrary. Either in the public administration or the nonprofit volunteer management is the key to offer continuing stimulus. (Li, 2009b, p.25)

In recent years, China's search and rescue team construction of specialization, socialization and internationalization has been enhanced and made remarkable achievements. Strengthen the ability construction of salvage, the establishment of a land, sea and air trinity efficient aid system, guarantee the offshore personnel, environment and property safety; China constantly improves Marine oil spill emergency technology and equipment, and effectively protects the Marine ecological environment; To conduct water safety rectification action and focus on building long-term effective mechanism of maritime shipping safety, China effectively safeguards the maritime shipping and safe operations; Repeatedly successful salvage maritime distress foreign ships and personnel, establish and maintain the good image, head of the country. In recent years, the success rate of China's maritime search and rescue lives salvage has increased a lot.

But, in the maritime search and rescue, the construction of professional rescue power is difficult to cover the vast sea, but can only guarantee key Marine search and rescue and accident. And most of the water still needs the coordination for Marine government departments, enterprises and institutions, individuals, etc. social forces and the armed forces, armed police forces to participate in the rescue. According to statistics, China's social forces are involved in more than 70% of the maritime search and rescue work, since 2006. (Yuan, 2012b, P4)

Compared with abroad, there is no specific policy support for the China maritime search and rescue volunteers, and reasonable compensation mechanism has to be established. As professional search and rescue social forces, they won't be active to participate in salvage at sea. However, maritime search and rescue system of volunteer in our country has not yet fully been established, and complement of

maritime search and rescue force effect has yet to play out.

On October 9, 2008, the Central Guidance Committee of China stressed: “to vigorously promote the voluntary spirit, strive to expand volunteers, and strive to improve the volunteer service system, set up volunteer service socialization operation mode, to promote voluntary service has a larger update of development, make more people to become volunteers, make more volunteers good social fashion advocate, become socialist spiritual civilization of the communicators, and practitioners. ”

Transport volunteers attach great importance to the team construction work. On December 3, 2008, Ministry of Transportation asked transportation departments at all levels for: to carry out emergency rescue support service activities, especially professional emergency rescue knowledge and power unit, in-depth mobilization of transportation service volunteer widely talked about disaster prevention safety, evacuation resettlement, first-aid skills such as emergency treatment of knowledge, improve the ability of emergency disposal of the society and citizens; Take emergency rescue volunteer services into the government emergency response system, strive to improve the level of specialization of emergency rescue. " In the same year, the Transport department of Zhejiang pilot volunteers as the coastal maritime search and rescue team construction, made a exploration, prepared on the basis of summing up experience the work throughout the country in full swing.

1.3 Research ideas and research methods

In this paper, the author uses related theory as the background, and draws lessons from the research results of scholar, through theoretical analysis, and summarizes the practical experience to explore our government’s maritime search and rescue volunteers. This essay is divided into five parts. In the first chapter, the author introduces the study of domestic and foreign related maritime search and rescue

volunteers theory and summarizes corresponding research progress. In the second chapter, the author analyses articles related to the core concepts such as maritime emergency search and rescue, rescue volunteers and the failure of the relevant theory and incentive theory, with a detailed explanation and strict definition. In the third chapter, by analyzing the foreign advanced system of maritime search and rescue volunteers, the author sums up the experience and characteristics of management and points out the problems existing in the maritime search and rescue volunteers management in our country at present stage. Some prominent problems will be addressed in the summary. Finally, the author attempts to build the maritime search and rescue the volunteer management system in our country, find out the way to solve the problems of maritime search and rescue volunteers management, and provides reference for management of maritime search and rescue volunteers activities.

In addition, four methods are adopted to carry out this study.

(1) Comparative research. The author analyses the development history and current situation of the maritime search and rescue volunteers both at home and abroad as well as maritime search and rescue volunteers' management mode. Through comparison, the author draws on the successful experience of developed countries, and puts forward countermeasures and suggestions of perfecting our country's maritime search and rescue volunteer's management.

(2) Literature research. By reading a variety of newspapers, periodicals, magazines, papers and books, the author collected a large amount of data, with the purpose of understanding of maritime search and rescue volunteers management rules, regulations. Therefore, this article has important theoretical and empirical basis.

(3) Interviews. Through interviews with the competent authority of the relevant personnel and the maritime search and rescue volunteers, the author gets real raw data as the most reliable material basis for the study of this article.

(4) Empirical analysis. The author combines with the related management theory to analyze the advantages and disadvantages of the volunteer management, and summarizes revelatory experience so as to better service the management of the China maritime search and rescue volunteers.

Chapter II Related concepts and theoretical basis

2.1 Define related concepts

2.1.1 Emergency search and rescue at sea

Marine emergency rescue consists of two parts, maritime search and rescue at sea, maritime search refers to the coordination, through the department in charge of maritime safety use of existing personnel and facilities to determine the position of persons in distress. Salvage any can mobilize rescue force refers to the use of the person in distress bailout, and providing temporary medical service or other services, you need to safety and action. Due to the maritime search and rescue at sea during work time and the continuity of the work content, incorporating both work usually refers to emergency search and rescue at sea. Maritime search and rescue is to take part in an international collaboration by the state. According to the survey, each year about 400 ships have accidents in the world, so the rescue work and the importance of moral responsibility is causing concern in the international community. Therefore, we need to formulate relevant convention and rules. In April 1979, Hamburg conference adopted the 1979 International Convention on Maritime Search and Rescue, the convention sets clear the maritime search and rescue procedures, so that the national maritime rescue system can abide by the principles. When the ship is in distress at sea, in the first time a distress signal is issued, approaches of ship and coast station must be notified to the neighboring country according to the convention on maritime rescue organization rescue work. Distance closer to the ship in distress should be the first time to ship in distress to rescue of the ship. If the ship in distress is not equipped with the emergency position-indicating radio beacon (EPIRB) and salvaging the ship arrived in distress should take the leading position, and then according to the additional impact Marine environment datum for search and rescue. Search pattern according to the rescue ship and its equipment is equipped with the

case. Single vessel using datum as the center, with square or fan-shaped extension search area; Parallel search method can be used more rescue ship, sea and air collaborative search pattern also can be used for search and rescue. (Cihai, Maritime Search and Rescue)

2.1.2 The rescue volunteers

The increasing number of search and rescue volunteers has become an important force in maritime rescue system. With the deepening of the reform and opening up and the modernization in our country, the construction of maritime search and rescue volunteers have also developed significantly. Rescue volunteers refers to, volunteers who work personally using their own professional expertise to take part in the volunteering that needs these specific majors. Such volunteers is voluntary. Living and working as a local citizen, volunteers must pass a basic rescue method and technical training, and obtain the related rescue qualification grade, and have specialized rescue command commander and use of rescue equipment, tools, and ability.

2.1.3 Voluntary service

For volunteer service, people's understandings are different. Generally speaking, it refers to the volunteer community service organization or the behaviors that the public use their skills, resources, time and kindness for neighbors, the community, in order to provide the community with a large non-profit, non-professional, aid capable of making life and promote social development. According to the understanding of many scholars and authors, we define voluntary service as people who volunteer to contribute their time and energy, not for any material reward, to improve social life and promote social progress and the services provided. From this perspective, voluntary service is not gratuitous, voluntary contributions, but to promote the public

welfare purposes.

2.1.4 Volunteerism

In the launching ceremony, the "2011 International Year of Volunteers", the former UN Secretary-General Kofi Annan pointed out: "the spirit of volunteerism is the core service, unity and common ideals and make this world a better place faith from this sense, the spirit of volunteerism is the ultimate expression of the United Nations." This sentence tells the essence of volunteerism, expressing the people praise it highly. To sum up the spirit of volunteerism these words can be used: dedication, friendship, mutual aid, and progress.

The essence of the volunteerism spirit is noble dedication. Volunteers without remuneration in the case of the fame contribute to the society, which embodies the noble dedication. In 1938, Bethune gave up favorable living conditions in Canada, but traveled to China for the Eighth Route Army soldiers to provide medical care services. Unfortunately, he got wounded in his late rescue and sacrificed his life. However, Bethune's spirit of internationalism is an important manifestation of dedication.

The spirit of volunteerism is to promote camaraderie, to appreciate others, and to treat people with equal respect. This is the love of volunteers across the gap, across occupations, even across national boundaries. There is no cultural difference. There is no nation of the points, and whether high and low full equality of love. Medecins Sans Frontieres, regardless of the differences of race and religion, provides assistance for many victims, and their dedication is beyond national boundaries.

Volunteerism also includes a deep spirit of mutual help. Volunteers carry out a variety of social voluntary service activities to help those in distress with their own

hands, minds, knowledge and love. In addition, voluntary service, by using the "mutual" spiritual form of love to pass has waked up many people's loving heart, so that they began to sacrifice for others. And when the recipients get the ability to live, he will return it to the community, by caring others, helping others and contributing to the society's volunteer activities. These activities are covered by the voluntary profound "mutual aid" spirit.

The spirit of volunteerism is also an important part the spirit of progress, through participation in volunteer activities, volunteers, in promoting social progress, can also improve their own ability, as well as the spirit of progress in the voluntary activities in all aspects.(Baidu, the Volunteer)

2.2 Theoretical foundation

2.2.1 Failure theory

Volunteering is a complementary function of government functions and the social behavior of the market. It means that the government's failure and market's failure exist, which justify the existence and development of non-profit organizations. Volunteering is non-profit, independent, voluntary and public welfare, etc. During the transformation of China, especially in stages into a comprehensive volunteer service organization, volunteer service plays an important social role, and helps to strengthen and improve social services to promote social progress and build a harmonious society. Even though, voluntary service is still difficult to get rid of its own limitations, the so-called voluntary failure, manifested as lack of funds, independence, personnel and management system has not been straightened out.

Failure theory points out several major NGO shortcomings:

(1) Lack of charity. Expenditure of NGO activities have a huge gap. In terms of the ways to access to resources, the government is characterized by "force", for-profit

organization is characterized by "voluntary" and "beneficial", while NGO is characterized by "voluntary" and "public." NGO is used to "produce" public resources from three sources: public donations, government grants and fees. Voluntary contributions usually only share a small percentage, and service charges is a very sensitive issue. It is very easy to provide citizens, and will be resisted. It does not meet the NGO's mind. In general, the NGO will not be as their main source of resources. Therefore, whether historical or present, government subsidies have been a major source for non-governmental organizations, and their budget expenditure dominates and is still in an upward trend. However, due to the new public management movement and the government reshape movement, governments are more and more incapable or has little desire to support NGOs. (Bi, 2008, p.122)

(2) NGO is often paternalistic. The actual control of economic resources on how to use the resources of the people has a greater right to speak. The decisions they make often neither seek the views of the majority, nor have to get public accountability and to accept monitoring. (Xie, 2002a, p.91)

(3) NGO is an amateur. NGO emphasizes that volunteer, volunteer service, work is often served by a caring volunteers, which will inevitably affect organizational performance and service quality. Meanwhile, the NGO can not offer attractive wages, thus it is difficult to attract professionals to join, which also affects the efficacy of NGO. (Xie, 2002b, p.91)

(4) NGO's object has limitations. As previously mentioned, as a supplement to government failure, NGO's active object is often only certain social groups, such as a particular race, a particular religion, the inhabitants of a particular region, gender and age specific. Because different NGO's ability to raise funds, organize and mobilize activities is different, different groups of services will certainly be different. For example, if each group must establish their own charitable organization, the services provided by many organizations is difficult to generate economies of scale, or at least, cost-effective. (Liu, 2008, p.5)

2.2.2 Motivation theory

The center of early studies of motivation theory is "need" , and it answers what the basis is. According to what it takes to mobilize the enthusiasm of the question, it covers Maslow's hierarchy of needs, Herzberg's two-factor theory, and McClelland's need for achievement theory. Most representatives of the Maslow hierarchy of needs proposed human needs are of hierarchical levels, according to their order of importance are: physiological needs, safety needs, belonging and love needs, esteem needs and self-actualization needs. Maslow argues that when the need is achieved on a certain level, it loses its incentive effect.

The incentive theory Processes school feel, a process that needs to go through the development of a target impact on people's needs, and thus stimulate human action. It includes Fromm's expectations theory, Locke and Hughes's goal setting theory, Porter and Lawler's comprehensive incentive model, Adams' equity theory and Skinner's reinforcement theory. With economic development, the emergence of the division of labor and trade incentive problems created. Understanding of the behavioral sciences, human motivation stems from needs, the need is to determine people's goals, and inspire the effect on the human heart, can play inspire, drive and strengthen the role of human behavior. So become a behavioral science theory of motivation for processing needs, motivations, goals and behavior of the complex relationship among the four core theory. (Wikipedia, Maslow's hierarchy of needs)

When the volunteers participate volunteer service, each volunteer has his or her own needs and motives. Volunteer organizations should start from the volunteer motivation, aim, according to the orientation of each volunteer and take appropriate measures in order to inspire their enthusiasm.

Chapter III Current volunteering situation of Maritime search and rescue

3.1 Features of maritime search and rescue volunteers

Because of the sea environment, the maritime search and rescue volunteer, compared with land-based volunteer activities, has the following characteristics:

(1) The risk of voluntary activities is big. The risk of the activity is far greater than the risks in land. Because the occurrence of dangerous situations at sea often occur in the bad weather and sea conditions are more severe, the volunteers in the implementation of relief operations face great risks.

(2) The requirements of professional skills. The requirements of the volunteers ,such as their professional skills and quality requirements, are far greater than volunteers working in land. Engaging in maritime rescue, volunteers need to have knowledge of self-help, professional knowledge and skills as well as a healthy body.

(3) The daily training is difficult. Because maritime search and rescue volunteers need to have high professional skills and physical fitness, so the volunteers' daily training is particularly important. Volunteers need to regularly receive relevant skills training and physical exercise at the same time. Also they need to participate in the corresponding maritime search and rescue exercise, through volunteer search and rescue exercises to improve their emergency response capacity. Compared to the training of other volunteers, maritime search and rescue volunteers need to have a more difficult training.

(4) Voluntary activity involves a wide range. Maritime search and rescue work is needed to support each other with multi-system engineering, and participate in live maritime search and rescue, In other words, the volunteers rescue service is only a

small part, the volunteers also shoulder responsibilities including the relevant personnel training, medical assistance, inshore rescue, rescues translation of self-help in distress at sea, as well as recruitment of volunteers and daily management and other related work. The scope of work involves more extensive volunteer activities than that on land, and it is more difficult to manage.

(5) The capital requirement of team management is big. Volunteers' spending is mainly engaged in maritime search and rescue operations for the purchase of life insurance of volunteers with appropriate training equipment, as well as participation in voluntary action salvage ship appropriate compensation and incentives. Capital requirements have a substantial increase compared to the other volunteers. (Yuan, 2012c, p.11)

3.2 Construction and characteristics of developed countries' maritime search and rescue volunteers

The rise of volunteer service in Europe is earlier, which is about 200 years. Voluntary service activities flourish and expand community-building, emergency management, environmental protection, major sports events and many other aspects. The activities of volunteers involved in the rescue are relatively late, although the South snowstorm and earthquake has made certain achievements; however, compared with search and rescue volunteers of developed countries, there are still some gaps. In Europe and other developed countries, they generally adopt full-time staff as the main force. Search and rescue volunteers and civil society organizations serve as an important complement to constitute a team of search and rescue personnel. Firstly, volunteers can promote maritime safety knowledge, then with necessary equipment, volunteers can do careful trainings for personnel, and finally, they can be qualified as efficient search and rescue volunteers.

3.2.1 Royal National Lifeboat Institution (RNLI)

Royal national Lifeboat Institution has been established since 1824 in the UK and Ireland to improve maritime search and rescue services. The main task is to rescue life at sea and promote maritime safety. The current scope of the relief has been extended to inland waters, also provides with beach life rescue services. Currently, UK and Ireland have 236 stations and 57 rescue boats beach lifeguard stations, enabling them to 100 nautical miles from shore on maritime and rapidly respond to victims. The strategic criteria of RNLI service are: In any condition, within 30 minutes to reach 10 sea miles away from the shore of any distress location arrival rate 900h. RNLI is responsible for maritime search and rescue. RNLI crew rescue station is served mainly by volunteers and all funds are derived from the community volunteer donors, heritage, fundraising and sell items, which are an independent charitable organization and MSC guard with good cooperation. English Department MSC guard search and rescue responsibilities primarily coordinate with other agencies to provide maritime search and rescue emergency response. RNLI operates a length of 16-55 feet of professional rescue boat fleet. More all-weather lifeboats are auto-righting, equipped with modern navigation, positioning and communications equipment. After receiving the notice of danger, lifeboat was dispatched in 14 minutes. (Deng & Zhang, 2010a, p.26)

3.2.2 Japan Water Difficult Relief

Japan Water Difficult Relief remedy the coast of Japan is earlier civil power spontaneously organize themselves. It is currently headquartered in Tokyo, and has a total of 24 divisions. including 410 of the branch. Japan Water Difficult Relief will have 85 small rescue boats and more than 19,000 volunteer search and rescue personnel. The Japan Coast Guard will be regarded as shipwreck emergency system, and it is an integral part of their work, in addition to providing guidance, and giving the necessary assistance. (Yuan, 2012d, P17)

3.2.3 The German Maritime Search and Rescue Service (DGzRS)

DGzRS, a German civil society at sea, founded in May 1865, is the world's first national maritime search and rescue group. The characteristics are as follows: First,

the structure of the agency set is reasonable and efficient. Its headquarters have only three departments "maritime rescue and supervision", " internal management and supervision" and "foreign propaganda and publishing". They have 33 employees. The subordinate Bremen maritime search and rescue center has only 17 staff responsible for 24 hours' on duty throughout the country's 54 rescue stations and 17 monitoring points, responsible for the specific implementation maritime search and rescue work. Second, DGzRS has advanced technology and equipment. German Maritime Search and Rescue Association currently have 61 7-44 m-class rescue boats and effective coverage of the search and rescue communications network. Rescue boats have all-weather search and rescue operations. Third, the organization has a volunteer-based staff structure. German Maritime Search and Rescue Association currently has nearly 1,000 staff, including 750 volunteers. The rest are full-time employees, but the staffs monitoring points are all equipped with volunteers. Fourth, the organization is mainly funded by social contributions, which accounts for about 80% of total funding. (DGzRS, The German Maritime SAR-Service)

In summary, foreign water rescue shipwreck and social forces participating in search and rescue at sea play a very important role. They are supposed to operate more efficiently, since they bear the primary responsibility for human life rescue.

3.2.4 The successful experience of Maritime Search and Rescue volunteers of developed countries

In developed countries, the existing system of maritime search and rescue has a distinguished advantage in the programming, socialization, specialization of search and rescue forces, as well as the organization coordination of rationalization. The main reasons can be summarized as follows:

(1) A sound mechanism of laws and regulations. Germany has a large number of maritime search and rescue volunteers with expertise and high consciousness. German volunteer career is so developed, not only because German nationals have to participate in public affairs. There is an important reason for this is a perfect matching of laws and regulations. German law stipulates that the state implements universal

compulsory military service, compulsory military service period is 10 months. The 18-23 year old male should fulfill military service. If the citizens served as volunteers in disaster protection and have reached certain age, they can exempt from military service obligations. Meanwhile, the German law for specific national institutions or public welfare work of the volunteers enjoyed the government's legal obligation to purchase insurance to solve the worries of volunteers.(Ling, 2010a, P9)

(2) Comprehensive training system. In the UK the agencies engaged in maritime search and rescue search and rescue personnel have attached great importance to training, to equip the volunteers with a relatively strict standard of service. Although the UK's search and rescue mission extensively relies on volunteers, neither the MCA, or the RNLI has a relatively sound training system to ensure that volunteers can have a high professional level. In Germany, to become a qualified emergency rescue volunteer, one need a long-term specialized training. Volunteer training is generally divided into two stages. The first stage is the basic theoretical training. The second stage is simulated with drills. Each organization has its own emergency rescue volunteer training systems and training courses. Most of these emergency rescue volunteers, will use their spare time for training. (Ling, 2010b, P9)

(3) Advanced procedures. For example, UK imposes fat management on maritime search and rescue, which means MRCC is not according to administrative authority, but according to geographic location settings. Local governments generally do not interfere with search and rescue work. From the alarm, response, search and rescue command to terminate all be coordinated by the MRCC. MRCC duty officers are authorized to deal with the appropriate search and rescue operations. The search and rescue organizations and volunteers can be actively involved in, according to the procedure to further expand the search and rescue operations, and thus can guarantee an excellent job.(Wu, 2007a, P53)

(4) Strong rescue Co-ordination. British search and rescue organization emphasizes cooperation. Although MCA (MRCC), RNLI and military institutions run independently, it demands good collaboration and self-discipline in the rescue.

Through holding various meetings regularly to exchange and relief activities to reach a consensus in many aspects, greatly improving the efficiency of rescue work. For example, when RNLI setting rescue boats base the MRCC will certainly listen to the opinions and seeking insights, rescue boats leave the base, they must promptly inform MCA (MRCC), so as to avoid unnecessary trouble. Rescue boat for whatever reason leave the base over 3 hours (including repair boats), must be arranged in advance with alternative rescue boats on standby at the new rescue mission, and timely notification MRCC. Once the MRCC informs maritime danger, the search and rescue forces can act quickly to participate in the search and rescue ranks. (Wu, 2007b, P54)

(5) Reward protection in place. In recent years, some European countries are shuttering and the labor market becomes more competitive. Coupled from negative population and growth with other factors, in order to curb the threat of decreasing emergency volunteers, attract more young people to the emergency rescue volunteer organizations, some national governments have developed appropriate incentives to attract more people to join in the ranks of volunteers. For example, in the German Ministry of the Interior every year a large number of posters, and leaflets are issued to carry out exhibitions, and set up volunteer rewards program. At present, the German Ministry of the Interior set up a volunteer awards as follows: FN and Youth Work Award (prize money of 7,500 €), Best Performance Award (prize money of 7,500 €), an exemplary behavior of employers' award. On the 5th annual International Volunteer Day in December, German Department of Civil Protection and Disaster Relief (BBK) presented these awards to encourage participation in emergency rescue volunteers. (Ling, 2010c, P10)

3.3 China Maritime Search and Rescue volunteers Situation and Features

3.3.1 Analysis about the current situation

Our volunteer service was originated in the 1960s in Africa and Latin America and

other third World countries. In recent years, with the reform and opening up and modernization, the building of our volunteer team gradually entered a rapid development period. Obviously, volunteers in China's economic and social development and spiritual civilization has played an increasingly important role, such as the fight against the South in 2008 referendum rain and snow disaster, Wenchuan earthquake and Beijing Olympics. Volunteers are very enthusiastic and contributed a lot to these events. At present, the building of China water search and rescue volunteer team is gradually developing.

Firstly, there are some successful international experience. It has become an international maritime search and rescue work. Maritime search and rescue volunteers in Europe and other developed countries has become a maritime search and rescue emergency response force in the central part, playing a very important role. Therefore, it has a broad mass base and good social reputation in the international arena. Maritime search and rescue volunteers construction has entered the organization, standardization and institutionalization of the rapid development track, and formed a relatively mature regulatory system and operational mechanism. It is note worthy that forming the provisions and we have made great achievements in regulations, the specific training, and management and other measures, as well as maritime search and rescue volunteers team building.(Liu, 2010a, P48)

Secondly, there is a demand of maritime search and rescue volunteers. In recent years, with the deepening of China's reform and opening up, China's port and shipping industry has been developing very rapidly, but the government can't provide enough maritime search and rescue services to meet the needs of the majority of society. There is an urgent need to mobilize the whole society to participate and support our port and shipping industry, to vigorously develop social service agencies, thus greatly promoting volunteerism. At the same time, along with China's rapid economic development, people's material living standards have been generally improved, and thus people's enthusiasm for social events are constantly improving. To participate in

and promote volunteer service can fulfill their social responsibilities as the majority of citizens' inner need. Therefore, the external demand for voluntary service and internal needs together formed favorable conditions to promote the construction of volunteer work. (Liu, 2010b, P48)

3.3.2 Problems in China maritime search and rescue volunteers

There are still many problems when it comes to our volunteer team building. We need to formulate relevant policies to address such questions that are related to our volunteer team's future trends.

(1) Lack of systematic legal support. In volunteer services, China's legislative support lags behind. So far, only the central government has introduced the "China registered volunteer management approach", but there is no existing national volunteer service laws and regulations, therefore, associated rights and obligation of our volunteers is not clear. At the same time, in the actual daily work, there are multiple management situations need to be addressed. (Liu, 2010c, P49)

(2) Volunteers instability and great staff mobility. Especially in some key water ferry operations in the transit workers, because of its operating range is fixed, the volunteers are the backbone of. However, the frequent changes of ferrymen is not conducive to improving the quality of search and rescue volunteers, and likely to cause poor contact.

(3) Lack of appropriate training for volunteers. Rescue is a work requires strong professional and technical training. If volunteers have relevant experiences, their rescue efficiency can be greatly improved. In some developed countries and voluntary organizations, they have specialized training for volunteers, but our volunteers do not. According to the survey, 84.7 percent of the volunteers have not participated in the emergency response training (Figure 1.1)

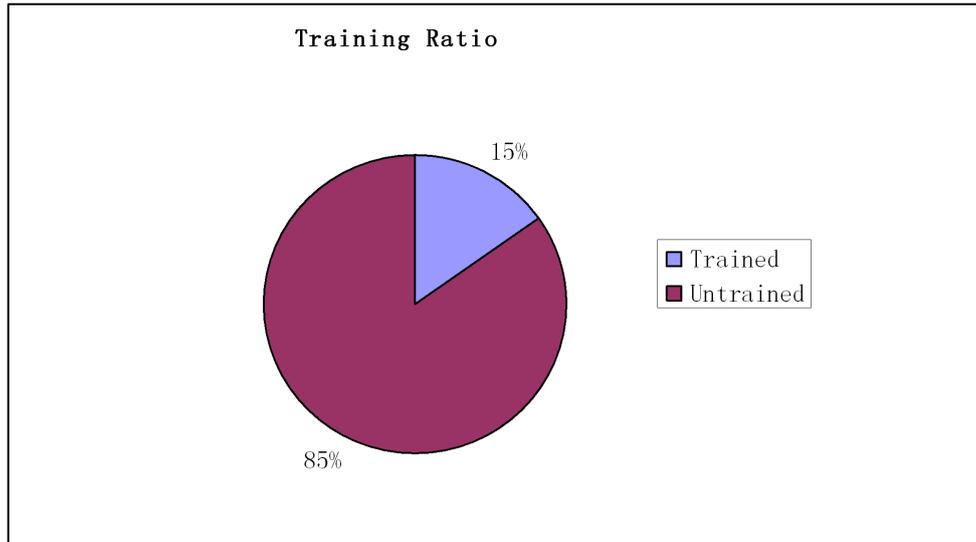


Figure 1.1 Training Ratios

Source: Yuan, X.T. (2012f), *China Maritime Search and Rescue Volunteers Management Research*. Unpublished Master Thesis, Dalian Maritime University, Dalian, China.

(4) Volunteers' volunteer service is not a stable funding guarantee. So far, China's emergency volunteer work in carrying out the process is not a reliable source of funding, and even the costs of volunteer work for the protection of normal development sometimes are not adequate. This situation greatly affected the volunteer team building normal sustainable development.(Zhu & Liu, 2012a, P23)

(5) Lacking of a sound social support networks. In developed countries like Europe countries and America ,volunteering improve social support networks. There is not only government support, but media support, and religious support, business support, community support agencies, and non-governmental institutions support. So many social groups became active support volunteerism and promoters. In our country the other types of civil society is extremely underdeveloped, thus unable to provide support for the voluntary service. Enterprise Support volunteer service was not able to enjoy tax benefits. Therefore, to carry out voluntary service water in the capital, equipment, facilities, etc. There are still a lot of difficulties. (Zhu, 2012 a, P14)

(6) Volunteers lack of unified coordination mechanism. Most volunteers' service goals are not clear. The lack of a unified coordination mechanism, will lead to relief

activities not carried out efficiently, and a lack of efficient allocation of resources. Most volunteers pay no attention to communication, as a result they waste lots of resources; In some areas, volunteers among regions are severely in lack of coordination. Moreover, in some areas, there are no volunteers to get involved. (Zhu, 2012b, P14)

3.4 Implications of China maritime search and rescue volunteers

Although the advanced management methods of various foreign countries volunteers' not identical, they have something in common. These commonalities can help to build China Maritime Search and Rescue volunteers.

(1) The public are greatly involved in volunteer service. In developed countries, such as the United Kingdom has continued to cultivate citizens with spirit of volunteerism, and whether to participate in the voluntary service or not is one index when it comes to education, employment, promotion and so on. Newspapers, magazines, radio, and special activities will be carried out to stimulate civic sense of crisis and publicity work, so there will be a large number of various volunteer organizations. (Zhao, 2006, P77)

(2) Search and rescue volunteer organizations in general are strong. Developed countries have a variety of volunteer organizations and volunteer associations. For example, in the U.S., Christian Disaster Center, emergency services teams, search and rescue forces of social assistance centers together assist grassroots civic organizations. Britain has mountain rescue, Women Volunteers Association, Radio Emergency Association. In short, all kinds of volunteers in different organizations participate in relevant training and assistance activities, thus to avoid the unorganized and non-duplication of coordination. (Yuan, 2012e, P20)

(3) The nations pay a lot of attention to the search and rescue volunteer training.

Whether the United Kingdom, Japan, Germany or the United States, these countries attach great importance to the training of the volunteer work and big investment are made in training. These developed countries with special emergency rescue School of Management develop appropriate training programs to develop and implement training evaluation, the areas of training is also very extensive. In the training they implement advanced equipment, and focus on ways to use simulation exercises. Not only that, but also after the end of each training they will set the corresponding exam, and only those who pass the exam can become a member of the search and rescue management organizations.

(4) Developed foreign countries have comprehensive laws and regulations to ensure that search and rescue volunteers have a positive work attitude. Developed countries generally have their own search and rescue management laws and regulations, to ensure that the search and rescue volunteers to participate in relief activities to the various benefits. For example, the United States in 1973 formulated the "Domestic Volunteer Service Amendment Act", and later issued a "Volunteer Protection Act" and other volunteers to safeguard the rights of the volunteers bring a variety of favorable laws and regulations. Britain also earlier developed a volunteer management laws and regulations, in 2004 adopted the "national emergency bill", and then issued the "2005 Act domestic implementation of the draft regulations state of emergency" and so on, make volunteer's search and rescue duties. (Li, 2009a, PP22-23)

This paper argues that China should learn from these developed countries on the establishment of maritime search and rescue volunteers. By combining foreign experience with our search and rescue volunteers, more achievements can be made on the national rescue volunteer construction work.

Chapter IV Framework of China maritime search and rescue volunteers building

4.1 Maritime search and rescue volunteer organization

Maritime search and rescue work is usually done by a ship or aircraft from two aspects: expertise and non-professional. Expertise refers specifically to maritime search and rescue or salvage ships, aircraft and other facilities. This force has been designed and fully taken into account in the design of the different objects and their appropriate tasks in rescue operations. The obvious characteristics of their work make it become a major force in maritime search and rescue. Non-professional forces include crossing and adjacent waters (including ports) various vessels moored. As non-professional forces, they are not designed specifically for salvage, and are not directly stated as appropriate relief work. However, the ship participating in rescue should be able to arrive at the rescue place in time, so that it can perform the rescue work and competent of certain kind of work.

(1) The establishment of China Maritime Search and Rescue Volunteer Association. China Maritime Search and Rescue Center establishes" China Maritime Search and Rescue volunteer steering committee" to be responsible for maritime search and rescue volunteer activities across the planning, directing, coordinating other activities. Meanwhile, the China Maritime Search and Rescue Volunteer Association is incorporated into the Ministry of Civil Affairs. (Deng & Zhang, 2010b, P27)

(2) The establishment of provincial, prefecture-level maritime search and rescue volunteers, who will be responsible for maritime search and rescue center by the local leaders or local community. Those volunteers will be responsible for setting up of

the region's maritime search and rescue volunteer service stations, the relevant Articles of rulemaking, event organization and implementation work. Those volunteers will be responsible for maritime search and rescue volunteers, maritime search and rescue operations training and maritime search and rescue volunteer service activities guidance. (Deng & Zhang, 2010c, P27)

(3) Setting up maritime search and rescue volunteers service stations. The stations will be responsible for a region or part of the waters within the scope of volunteer recruitment, appraisal award and daily management. Volunteers from the local maritime organizations, rescue and other related departments can carry out training, such as regularly carry out maritime emergencies science education, maritime search and rescue in the relevant language translations of persons in distress at sea and primary medical care and so on. The service stations can guarantee safety, health protection and provide other conditions for volunteers. (Deng & Zhang, 2010d, P27)

4.2 Maritime search and rescue volunteer program management

4.2.1 The basement of the plan

Maritime search and rescue volunteers plan preparation work should be presented in the "volunteer charter", "volunteer annual work plan," "volunteers" twelfth five "work plan" and other documents prepared under the guidance of the principle.

4.2.2 Content of program

There are many types of maritime search and rescue volunteers plans, and different schemes have different purposes and focuses.

Maritime search and rescue volunteers Strategic Plan: its purpose is to make out principled provisions and description of search and rescue volunteer team building the

guiding ideology, working principles, objectives, tasks, scope of work, the basic approach, and safeguard measures. From the macro point of view, it provides search and rescue volunteers with supply and demand analysis, and works as a fundamental document for guiding maritime search and rescue volunteer work.

Maritime Search and Rescue Volunteer Action Plan: Under the guidance of the strategic plan, in terms of the different characteristics of dangerous situations at sea and distribution of volunteer forces, we develop a variety of maritime emergencies action plans. The maritime, salvage and other units for a variety of marine search and rescue experts train the search and rescue volunteers according to emergencies, to ensure the search and rescue volunteers get familiar with all kinds of emergencies action steps.

Maritime search and rescue volunteer recruitment, promotion, training and other functions of the operating plan: this plan mainly decides how to implement the various tasks and the successful completion of all aspects of the work, from the microscopic point of view. It aims to analyze the needed recourses of maritime search and rescue volunteer recruitment, promotion, training, operation, incentives and other aspects of the work. And through consultation with the relevant departments, this plan can help to establish mechanisms to mobilize resources, approaches and responsibilities. (Li, 2009d, p.33)

4.3 Maritime search and rescue volunteer's recruitment management

Maritime search and rescue work is related to life and property safety of the public, and reflects the government emergency rescue capability and the level of public services. To ensure the safety of life at sea, prevent marine pollution and promote economic and social development, volunteers' management plays an important role. Maritime search and rescue volunteer service is a maritime rescue center and its unpaid volunteers are responsible for the rescue of persons in distress at sea or ship.

Maritime search and rescue volunteer services include sea life, property salvage services, preventing pollution of the marine environment and other relief activities. Maritime search and rescue center and its volunteer service objects are based on the actual needs of applications in order to provide maritime search and rescue.

4.3.1 Search and rescue volunteer recruitment methods

China's coastal provinces and cities have rich volunteer resources. Merchants, fishing vessels practitioners, sailing professionals, students, and tour boats drivers, Navy veteran drivers, and other related personnel with minimal training can become professional search and rescue volunteers. Now, for the maritime search and rescue volunteer recruitment, generally, it follows the principle of "open recruitment, voluntary registration, organizing selection" approach. It is open to the community to recruit maritime search and rescue volunteers. (Tianjin Maritime Search and Rescue Center, 2010, p.8)

4.3.2 The conditions of the search and rescue volunteer recruitment

The conditions of the recruitment of Maritime search and rescue volunteers should be clearly defined, because of its particular working conditions and environment. Recruitments should be clearly specified. The application conditions include dedication, expertise; independent research and problem-solving skills, strong organizational skills, language skills and teamwork spirit; and hard working, strong-willed, good health and so on. According to the different working contents, volunteers should be equipped with corresponding capabilities. Volunteers must have detailed understanding of the organisation should be equipped with the required skills. Factors such as knowledge structure, age, psychological etc. should be considered, and a job description should be provided as a major reference.

4.3.3 The main groups of search and rescue volunteer recruitment

There are many ways of recruiting volunteers. The maritime search and rescue organisations, you should choose a reasonable way to recruit personnel who have expertise in this area. Regardless of the recruitment methods, I think in the early stages of maritime search and rescue volunteer recruitment, persons who have working experience in fishing vessels and inshore yacht practitioners should be primarily considered. First, practitioners and inshore fisheries yachtsman have rich experiences at sea, are aware of characteristics of the area. Only with a little training to participate in search and rescue, can they start the work. Secondly, considering the distribution of a wide range of fishing vessels, they can effectively play their roles as fast as possible, so as to reduce the maximum loss caused by accidents and disasters, and to improve human life rescue capability. (Liu, 2010d, p.49)

4.3.4 Search and rescue volunteer recruitment screening

We should perform effective selection work after regulating the recruitment goal and choosing the appropriate recruitment method. At first, volunteers should not only have good characters and attitudes but also have a high degree of responsibility, and they should be good at cooperating with others and follow the organizational arrangements, as well as conscientiously and actively organizing and completing the tasks assigned by the organization. Written tests, interviews, practical ability testing and psychological testing can be used to test the qualification of volunteers, and the ultimate recruitment decision must be based on demand. Following these principles, organizations can decide the final list of qualified volunteers in order to ensure that they can fully exploit their potentials.

4.4 The training management of maritime search and rescue volunteers

This paper argues that the training management of maritime search and rescue volunteer is an important part. Because volunteers play the spirit of self-help and to save others, they must be appropriate to their professional training and carry out search and rescue work in the face of unexpected events. If they fail to do something useful, it not only can be unhelpful but will also bring a lot of problems for search and rescue activities. Some developed countries' attach great importance to the appropriate training of governments and relevant organizations will be on the search and rescue volunteer's and publish training materials for volunteers who need to rehearsal. After that, training will be conducted after the end of the evaluation. Such training methods should be our reference. Our country should design suitable training methods of search and rescue volunteers based on other countries' experiences.

Firstly, it is important for search and rescue volunteers to undertake basic training. Training should come up in different forms, such as search and rescue-related lectures and discussions. Through professional training, volunteers can improve their analysis and solving on the certain problems and their team spirit will be enhanced etc. You can invite a lecturer to concentrate on search and rescue training from outside; You can organize volunteering symposium; You can hold regular consultation sessions, service summary Council for volunteers and managers, which encourage them to share the pros and cons of voluntary activity. Volunteers are supposed to interpret about "maritime search and rescue volunteer management approach", "maritime search and rescue volunteers management system", so that they can understand the related work program and be aware that a few rules that should be followed. What's more, when the unexpected events occur, they should obey their works tasks and follow the assigned work processes. Also there should be live

demonstrations of the specific maritime search and rescue for the emergency rescue, as well as relevant content which occurred in coastal waters and other navigable situations. Maritime search and rescue volunteers should enhance emergency response capabilities through training, and dedicate to promote the development of maritime search and rescue volunteer services.

Secondly, professional training is needed for search and rescue volunteers. On the one hand, volunteer need to understand the theory of professional knowledge, such as the call for help, bleeding, fire, search and rescue, etc. On the other hand, arrange volunteers regularly to participate in emergency rescue drills. Because of the gap between theoretical knowledge and practical ability, those who are good at theory cannot necessarily have good practice in reality. The best way is to practice with the knowledge you're learned, and then test and enrich the theory with the practice. In this regard, a professor can help to guide and teach experience, and then sets a environment which is most similar with the real situation. This method allows volunteers an opportunity to practice the skills in an interactive simulation, so as to deepen their understanding and mastery of skills.

Finally, we need to train the psychological capability of search and rescue volunteers. It not only can reduce the psychological pressure of rescue so that they will not be panic in the course of the implementation of rescue activities, but also can inspire the morale of volunteers to achieve better rescue effect. It is common for people to be at a loss and don't know what to do when they are in face of the disasters and thus delay the best time of rescue. So it is necessary to train rescuers to have calm psychological capability and courageous courage when encountering a disaster. (Yuan, 2012f, pp.24-25)

4.5 The use and management of maritime search and rescue volunteers

China's current maritime search and rescue force is far from comprehensive. Rescue work is mainly based on the participation of broad social forces. However, due to the lack of appropriate policy support, the awareness of social forces to participate in life rescue at sea is not strong and enthusiastic. Thus, the search and rescue coordination is difficult. We need to establish appropriate assessment and evaluation systems of volunteer service, strengthen file management of search and rescue volunteers, and record service hours, frequency and content of services of the volunteer. The Maritime Search and Rescue Centers should evaluate the volunteers regularly and implement an "award excellent obsolete bad "system to honor and award volunteers and voluntary ships for their active participation and remarkable achievements in maritime search and rescue operations. And we need to stimulate the working enthusiasm of volunteers to improve the sense of honor. Meanwhile, this essay recommends that the maritime search and rescue volunteers should be divided into two kinds, which are professional and non-professional. The content and scope of volunteer work should also be clearly defined.

4.5.1 The use and management of professional search and rescue volunteers

The so-called professional emergency volunteer refers to personnel with emergency skills through professional training or work experience, such as crew members in fishing vessels, crossing merchant ships and tourism board vessels. In a state of emergency at sea, they should provide professional emergency, and be supplemented by non-professional volunteer emergency services. For the danger occurs near the sea coordinated by the Maritime Search and Rescue Center, conditional professional

search and rescue volunteers can participate in rescue operations of life at sea. Meanwhile, in non-emergency state, it also requires the involvement of professional volunteers. They can provide knowledge and guidance for non-professional volunteers.

4.5.2 The use and management of non-professional search and rescue volunteers

The so-called non-professional emergency volunteer refers to personnel who does not have the ability but has passed through the emergency salvage common sense training to participate in service, such as college students, foreign language translators and other people intending to involve in voluntary action actively. In non-emergency situations, the non-professional volunteers can implement as the principle part to take up the work of a large number of science advocacy, information transmission, material reserves and other work. Professional volunteers and non-professional volunteers cooperate with each other actively and enhance their skill levels through continuous learning, in order to make a greater contribution to emergency volunteer service.

4.6 Stimulation mechanism of search and rescue volunteers

4.6.1 Classification of volunteers by the work initiative

Volunteers are generally divided into three kinds. The first are that the volunteers who only require minimal guidance and encouragement to finish the work independently. The second are volunteers who can only do their job and have higher efficiency when they are stimulated and supervised constantly; the third are the volunteers who will not work well under what ever circumstances. The description of the problem indicates that most of the volunteers need external encouragement to

complete the task efficiently and effectively. In addition, since Chinese citizens' awareness of volunteer service is not strong, coupled with the search and rescue work on sea itself has a high degree of risk, the lack of a good stimulation mechanism makes it harder to ensure the initiative of search and rescue volunteers to join the activities and the upsurge of voluntary service enthusiasm. Thus, the establishment of a good stimulation mechanism of maritime search and rescue volunteers is crucial.

4.6.2 Ways to stimulate volunteers

Stimulations for volunteers can be divided into external stimulation and internal stimulation. External stimulation is generally material in nature, for example, volunteer organizations can provide meals, medals and other items provided by sponsors for volunteers participating in search and rescue. Internal stimulation is mostly mental motivation which makes search and rescue volunteers feel the social recognition of their work as well as the sense of accomplishment in the work process as volunteers. We can use mental stimulation supplemented by material stimulation to enrich the forms of stimulation and encourage effective voluntary services. First, the government should give adequate publicity and space to Volunteers Association. Volunteers Association should be allowed to build their own web page, so that they can publish the latest volunteer activities to the public through the website and express recognition and appreciation for volunteer work. Through this way they can attract more people to participate in services and help others; On the other hand, volunteers can be respected and understood in the service process, and they can deeply understand that they are part of the community, and then generate long-term dedication to the community. Secondly, keep the daily motivation to volunteers. First, managers should always care volunteers with a grateful heart and deliver sincere wishes to volunteers in important festivals, or demonstrate their performance in the form of postcards or posters to family and friends of the volunteers; Third, for volunteers with outstanding performance in the volunteer activities, they should be

named in recognition in the regular meeting; We can also set volunteer service bulletin boards and post photos of volunteer activities regularly to make everyone know the arduous labor of volunteers and their contribution to society; Besides, arrange recreational activities for volunteers to promote communication between volunteers and enhance cohesion of volunteer organizations; Respect the idea of volunteers, and their opinions and suggestions should be considered carefully. (Zhang, 2009, pp.95-96)

These mental and material incentives can greatly improve the volunteer participation rate, improve their respected by others needs, and make them feel respected, which can gradually make volunteer service become inexhaustible power.

4.7 Maritime search and rescue volunteer organization and management of the funding

At present, China's maritime search and rescue volunteers do not have a special source of funding. While the annual China Maritime Search and Rescue Center and part of the provincial maritime rescue center will actively participate in search and rescue operations at sea and the ship, and have made significant achievements. The financial incentives, however, are far from adequate. This paper recommends the use of government funds to actively expand the sources of funding for emergency volunteer service channels, thereby to ensure the emergency volunteer service running smoothly. The "financial allocation Foundation social sponsorship" fund-raising mechanisms is. Among these three sources of funds, the government's financial allocation is the most stable and is recommended currently guaranteed. With the progress of society and the continuous development of volunteer organizations, and social sponsorship funded emergency volunteer service is bound to become the main channel of funding sources, so we can now take some proactive fiscal policies to guide funding from the community. For example, you can set up a special emergency Volunteer Service Foundation, through the improvement of financial management system to attract social funds as an emergency volunteer work of the

special fund and periodically conduct audits. There we can take tax-free enterprise approach to encourage more enterprises to participate, and an award name the "social welfare Award" can be proposed. In short, we need to reform the current funding mechanism for raising fund, accumulation innovative ideas and expanding the maximum emergency volunteer service, so as to broaden the funding sources. (Mao & Zhang, 2012a, P33)

4.8 Recommended safeguards on maritime search and rescue volunteer system

China's maritime search and rescue are lack of experience, and is still in an early stage. Therefore, we should learn from others' experiences so as to build advanced maritime search and rescue safeguards. This paper argues that we should make efforts from the following aspects:

(1) Better equip the appropriate rescue equipment. At this stage, in order to rescue, the Maritime Bureau must make reasonable arrangements for planning rescue equipment location, not only to ensure full coverage of standby search and rescue forces, but also to improve its performance in order to ensure all-weather operation and rapid response

(2) A reasonable allocation plan at all levels of command and coordination should be carried out. Coordinate search and rescue organizations at all levels to rationalize the scope of the search and rescue agencies at all levels as well as rights and obligations. Establish a national rescue network, thereby enabling human and physical resources can be maximized to improve the efficiency of search and rescue.

(3) Establish appropriate search and rescue volunteer training institutions, in order to improve volunteer's mental ability and professional ability. Make sure that volunteers are capable of conductry good and rescue in face of sudden disasters at sea.

(4) According to contingency plans, appropriate agencies in the face of emergencies at sea, can be targeted for rapid response, search and rescue to secure the maximum time. With the introduction of science and technology electronic equipment, the possibility of searching for survivors can be greatly improved.

(5) Explore the establishment of social forces to participate in reasonable rescue compensation mechanism. Various social forces to participate in search and rescue will spend some time, effort, and resources. Given to institutions and individuals in this regard, certain compensation and policy support can be made to attract more people or organizations to get involved in maritime search and rescue work. (Zhu, 2012c, p.15)

(6) Explore the establishment of volunteer search and rescue organization which is widely used in developed countries. These experiences can help to formulate a volunteer search and rescue organization model, which can not only save personnel costs, but also improve the many people's maritime search and rescue's capability.

(7) Explore the establishment of a scientific assessment of maritime search and rescue. In order to improve the emergency response plans and procedures to deal with a variety of situations, the establishment of evaluation system is needed. Regular statistical summary of the data types of search and rescue, maritime search and rescue center at all levels of the unit regularly assess the situation to carry out search and rescue operations, and conduct competitions. (Zhu & Liu, 2012b, p.23)

(8) Recruit appropriate search and rescue volunteers, and come up with security system. Besides, actively enhance cooperation with insurance companies, and expand the participation of maritime search and rescue operations. Purchase the corresponding personal insurance for first-line volunteers. (Mao & Zhang, 2012b, p.33)

CHAPTER V Conclusion

In recent years, emergencies at sea have increased greatly. According to international disaster prevention, the mitigation experience has shown that the involvement of emergency volunteers can produce better results than the single government forces. Based on the emergency volunteer studies, the author arrives at the following conclusions:

(1) There are many problems regarding the management of our marine emergency volunteers, First, participation rate in search and rescue volunteer is lower than developed countries. Second, the operation of maritime emergency search and rescue is non-organized, non-coordinated, non-professional, low potential for sustainability, and lacking incentives.

(2) The problems mentioned above are largely due to the lack of maritime search and rescue volunteer organizations. There is no corresponding unified coordination mechanism, and there is a lack of trained search and rescue volunteers. Besides, the training needs to be improved in the aspect of volunteer motivation and psychological stress management.

(3) In this paper, the author conducts a comparative study between foreign maritime search and rescue volunteer management experience, and domestic organizations. The author proposes to establish a unified communication and coordination mechanism, in order to improve maritime search and rescue volunteers' recruitment, training, management, as well as the funding sources. Besides, the author also puts forward corresponding countermeasure.

In this paper, the author conducts a comparative study between China and some

developed countries, in the respect of the organisation and management of search and rescue volunteers at sea. Through analysis and comparison, the author proposes a comprehensive and practical establishment organisation based on western experiences.

Considering the complexity of emergency volunteer management, there are some limitations of this study. For example, the organization and management of the funding of volunteer work in maritime search and rescue have not been carried out adequately.

References

- Baidu. (2013). *Volunteerism*. Retrieved March 26, 2013 from the World Wide Web: <http://baike.baidu.com/view/7226.htm>
- Bi, T. (2008). Analysis of Salomon Theory of Government and Nonprofit Organizations. *Philosophy and Public Management Institute of Liaoning University*, 10.
- Chen, Jian. & Liang, Si. Ying. (2013). The Influencing Factors of Volunteers to Participate in Volunteer Service. *Journal of Hubei Correspondence University*, 122, 4.
- Cihai. (2013). *maritime search and rescue*. Retrieved March 10, 2013 from the World Wide Web: <http://www.xiexingcun.com/cihai/H/H0230.htm>
- Deng, S. H. & Zhang, Q. (2010a). To build up a voluntary force for maritime (waterborne) search and rescue in China. *China Maritime*. 6
- Deng, S. H. & Zhang, Q. (2010b). To build up a voluntary force for maritime (waterborne) search and rescue in China. *China Maritime*. 6
- Deng, S. H. & Zhang, Q. (2010c). To build up a voluntary force for maritime (waterborne) search and rescue in China. *China Maritime*. 6
- Deng, S. H. & Zhang, Q. (2010d). To build up a voluntary force for maritime (waterborne) search and rescue in China. *China Maritime*. 6
- DGzRS. (2013). *The German Maritime SAR-Service*. Retrieved May 16, 2013 from the World Wide Web: <http://www.seenotretter.de/english.html>)
- Li, M.H. (2009a), *Chinese Non-profit Organization Volunteer Management*. Published Master Thesis, Mongolia University, Mongolia, China.
- Li, M.H. (2009b), *Chinese Non-profit Organization Volunteer Management*. Published Master Thesis, Mongolia University, Mongolia, China.
- Li, M.H. (2009d), *Chinese Non-profit Organization Volunteer Management*. Published Master Thesis, Mongolia University, Mongolia, China.
- Ling, X. W. (2010a). The Feature and the Enlightenment of the Volunteer System of German Emergency Rescue. *Journal of Liaoning Administration College*,5.
- Ling, X. W. (2010b). The Feature and the Enlightenment of the Volunteer System of German Emergency Rescue. *Journal of Liaoning Administration College*,5.
- Ling, X. W. (2010c). The Feature and the Enlightenment of the Volunteer System of German Emergency Rescue. *Journal of Liaoning Administration College*,5.
- Liu, K.R. (2010a). Volunteer team construction for maritime rescue operations. *Maritime Management*, 5
- Liu, K.R. (2010b). Volunteer team construction for maritime rescue operations. *Maritime Management*,

- Liu, K.R. (2010c). Volunteer team construction for maritime rescue operations. *Maritime Management*, 5
- Liu, K.R. (2010d). Volunteer team construction for maritime rescue operations. *Maritime Management*, 5
- Liu, R. (2008). *Government regulation of Non-governmental Organization Perspective Development Research*. Published Master Thesis, Hunan University, Hunan, China.
- Mao, Z. G., & Zhang, L. Q. (2012a). Maritime Search and Rescue Volunteers from Zhejiang Pilot about the Construction of Civil Search and Rescue Forces. *China Waterway*, 10.
- Mao, Z. G., & Zhang, L. Q. (2012b). Maritime Search and Rescue Volunteers from Zhejiang Pilot about the Construction of Civil Search and Rescue Forces. *China Waterway*, 10.
- Tianjin Maritime Search and Rescue Center. (2010). *Maritime search and rescue volunteers work rules (Trial)*, Tianjin
- Wikipedia. (2013). *Maslow's hierarchy of needs*. Retrieved May 10, 2013 from the World Wide Web: <http://zh.wikipedia.org/wiki/%E9%9C%80%E6%B1%82%E5%B1%82%E6%AC%A1%E7%90%86%E8%AE%BA>
- Wu, W. (2007a). Comparison of maritime search and rescue management between China and UK. *China Maritime*, 2.
- Wu, W. (2007b). Comparison of maritime search and rescue management between China and UK. *China Maritime*, 2.
- Xie, L. (2002a). The New Progress of Western Nonprofit Organization Theory. *Journal of Liaoning Administration College*. 1
- Xie, L. (2002b). The New Progress of Western Nonprofit Organization Theory. *Journal of Liaoning Administration College*. 1
- Yuan, X.T. (2012a), *China Maritime Search and Rescue Volunteers Management Research*. Published Master Thesis, Dalian Maritime University, Dalian, China.
- Yuan, X.T. (2012b), *China Maritime Search and Rescue Volunteers Management Research*. Published Master Thesis, Dalian Maritime University, Dalian, China.
- Yuan, X.T. (2012c), *China Maritime Search and Rescue Volunteers Management Research*. Published Master Thesis, Dalian Maritime University, Dalian, China.
- Yuan, X.T. (2012d), *China Maritime Search and Rescue Volunteers Management Research*. Published Master Thesis, Dalian Maritime University, Dalian, China.
- Yuan, X.T. (2012e), *China Maritime Search and Rescue Volunteers Management Research*. Published Master Thesis, Dalian Maritime University, Dalian, China.

- Yuan, X.T. (2012f), *China Maritime Search and Rescue Volunteers Management Research*. Unpublished Master Thesis, Dalian Maritime University, Dalian, China.
- Zhang, Y.H. (2009), Volunteerism and nonprofit organization volunteers' incentive analysis. *Journal of Chongqing University of Science and Technology (Social Sciences Edition)*, 10.
- Zhao, J. (2006). The emergency management system of Britain and the enlightenment. *China Economic Research*, 10.
- Zhu, B. Z. (2012a). Social Volunteers Participate Water Emergency Rescue Practice and Reflection. *Journal of Transport Management Institute Ministry of Transport of the People's Republic of China*, 22, 1.
- Zhu, B. Z. (2012b). Social Volunteers Participate Water Emergency Rescue Practice and Reflection. *Journal of Transport Management Institute Ministry of Transport of the People's Republic of China*, 22, 1.
- Zhu, B. Z. (2012c). Social Volunteers Participate Water Emergency Rescue Practice and Reflection. *Journal of Transport Management Institute Ministry of Transport of the People's Republic of China*, 22, 1.
- Zhu, B.Z. & Liu, L.X. (2012a). Promote social volunteers Participate Water emergency rescue theoretical inquiry, *Navigation*, 3
- Zhu, B.Z. & Liu, L.X. (2012b). Promote social volunteers Participate Water emergency rescue theoretical inquiry, *Navigation*, 3