

人道救助 與災害防救

Humanitarian Assistance and Disaster Relief

新境界文教基金會
國防政策諮詢小組
2014年12月

New Frontier Foundation
Defense Policy Advisory
Committee
December, 2014

國防政策

藍皮書

在彙整執政經驗與學者專家見解，以鼓勵對國防議題的理性深入討論，並作為民主進步黨政見與政策的參考。

國防政策藍皮書第八號報告
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序言

如同世界上其他國家，我國處於複雜的安全環境，面臨到不僅有軍事上的威脅，更有其他諸如天災、人為意外、傳染病、網路入侵與恐怖攻擊等等新興威脅型態。在此複雜的安全環境中，軍隊擁有相對於其他政府部門更具組織、更為迅速的因應危機能量。因此，除建軍備戰之外，各國軍隊逐漸地被賦予更多因應新興威脅的責任，其角色與任務都變得多樣且複雜。

國軍的存在目的在維持和平，保障國民生命財產與生活方式。動用武力以捍衛此一核心國家利益，是國軍最主要角色、任務與專業技能。但我們不應混淆目的與手段，硬實力不是維持和平的唯一工具。為因應複雜的安全需求，國軍必須擴大其角色與任務，強化在作戰任務之外的軍事效能。國軍從2009年的莫拉克風災中學習到許多經驗教訓，體認到國人對國軍保障他們生命財產的更大期待。從「國防法」增列災害防救為國軍任務之後，相關的裝備、部署與程序在過去數年均均有長足的進步。國軍在今年高雄氣爆事件的表現足堪典範，讓民眾對國軍的信賴大大地提昇。

從更高的國家戰略層次思考，區域乃至全球的秩序與安全攸關臺灣的發展與繁榮，而臺灣作為國際社會中負責任的成員，必須摒除自掃門前雪的心態，為區域與全球的穩定作出貢獻。而臺灣在災害防救及人道救援的能量與經驗正是我們能對國際社會的貢獻之一，也是我們與周邊友邦建立安全與共的信任關係之重要途徑。

Foreword

Like other nations in the world, we live in a complex security environment and face not only military threats but also many emerging types of threats, such as natural disasters, man-made catastrophes, infectious diseases, cyber intrusion, terrorist attacks, and so on. Compared with other governmental agencies, the armed forces possess better organized and more rapidly deployable capacities for crisis response to overcome such security complexities. Consequently, in addition to war-fighting readiness, all militaries in the world are gradually tasked to bear more and more responsibilities in coping with these emerging threats. The role and mission of the armed forces thus become increasingly diversified and multifaceted.

The *raison d'être* of our armed forces is to maintain peace and to safeguard our citizens' lives and ways of living. To protect such vital national interests by the use of force is conceived as the basic role, mission, and professional expertise of our armed forces. Nevertheless, we should not confuse means with ends: hard power is not the exclusive instrument in maintaining peace. In coping with complex security challenges, the armed forces should expand their role and mission in order to improve military effectiveness in contingencies other than war. Our armed forces learned many lessons from the catastrophe of Typhoon Morakot in 2009 and came to fully appreciate the high expectations that the public holds of the military in protecting the life and property of the people. Since the National Defense Act was amended to add disaster relief and assistance as one of the missions of the armed forces, there has been significant progress in related improvements of equipment, deployment, and procedure over the past few years. The military's exemplary performance during the Kaohsiung gas explosions incident of July 2014 won back the people's trust in our armed forces and was appraised as a paradigmatic achievement.

From a broader, national strategic perspective, given the importance of the regional or even global order for Taiwan's development and prosperity, our nation, as a responsible member in the international community, should reject an isolationist mentality and instead seek to contribute to regional and international stability. Indeed, Taiwan's capabilities and experience in disaster relief and humanitarian assistance can be one of our contributions to international society, and a meaningful avenue for shaping a security environment based on mutual assurance with neighboring friendly nations.

軍隊執行人道救助與災害防救任務——無論是在國內或海外——被稱為「複雜作戰」的原因在於任務目標本質、指揮權責與跨軍民機關協調的複雜性，經驗顯示：這並非想像中的容易。在國內執行此類任務時，國軍縱現有可觀的災害防救能量，但仍有精進的空間。故民進黨主張：

一、強化跨部會與中央／地方政府的溝通協調機制，有效縮短國軍部署時間；

二、國軍在災害預防、救助、復原各階段的任務範圍應更加明確界定，以提昇國軍於人、物力上的訓練／籌獲、準備、部署與動員上的效能；

三、國軍執行災害防救任務所需作業費用應由中央政府統籌專款專用；

於海外執行此類任務時，複雜度必然大增。為因應執行海外人道救援與災害防救任務之需求，包括國防部、外交部、海巡署、衛福部、消防署等相關中央政府部會應充分合作，並結合民間非政府組織、新住民或外籍生等民間能量。在國安會的協調下，先行完成組織、程序與技術面上的準備。本黨姚文智委員業已在立法院提出「國防法」等相關法律修正案，賦予國軍執行海外人道救援與災害防救更完備的法律授權，我們希望此一修正案能儘速在立法院審議通過。

除此之外，民進黨重返執政後，將致力於以下兩項促進海外人道救援與災害防救的創新作為：

The military's humanitarian assistance and disaster relief missions, in both domestic and foreign contexts, are considered "complex operations" because of the intricacies that stem from the nature of mission objectives, command authority, and interagency/civil-military coordination that such missions entail. Experience has shown that such missions are not as easy as we previously imagined. Though our military has considerable capacities in disaster relief, there is still room for further refinement even in implementing such missions domestically. The Democratic Progressive Party (DPP) thus suggests:

First, the interagency and central/local government coordination mechanism must be improved in order to effectively shorten the deployment time of our armed forces;

Second, the military's authorized activities in the prevention, rescue, and recovery stages of disaster relief missions must be clearly defined in order to improve the readiness and effectiveness of training, acquisition/recruitment, preparation, deployment, and mobilization of both personnel and assets.

Third, the operational expenditures of the armed forces in implementing disaster relief missions should be specifically earmarked in the central government budget.

Deploying our national armed forces in foreign humanitarian assistance and foreign disaster relief (FHA/FDR) missions will involve a still higher degree of complexity. FHA/FDR missions require comprehensive cooperation among related ministries such as the Ministry of Defense, the Ministry of Foreign Affairs, the Coast Guard Administration, National Fire Agency, and the Ministry of Health and Welfare, as well as combined efforts with civil sectors – for example, non-governmental organizations, new residents, or foreign students. Under the coordination of the National Security Council, all organizational, procedural, and technical preparations as to FHA/FDR missions must be prepared ahead of time. DPP legislator Yao Wen-chih has already proposed amendments of National Defense Acts and other related laws for the purpose of bridging the legal gap to authorize our armed forces to implement FHA/FDR missions. We urge that Yao's amendment be reviewed and passed as soon as possible.

Moreover, upon a return to government, the DPP will commit to the following two innovative FHA/FDR imperatives:

一、設立「亞太人道救援平台」。此一平台將由外交部出資，由具海外人道救援與災害防救相關經驗之民間非政府組織聯合運作，輔以我國與海外人道救援與災害防救各相關部會的協助。此一平台將提供臺灣與亞太周邊國家相關海外人道救援與災害防救之公務與民間部門的人員交流、經驗學習與共識形成，並主動協助相關的組織如「東協人道救援中心」、日本的「日本—東協整合基金」或美國國際開發署在海外人道救援與災害防救任務上的執行。

二、精進國軍與海巡署執行海外人道救援與災害防救任務之能量。除提高國軍、海巡署與相關部會演訓的頻密度、海空運運載能量與任務持久性外，將建置一支由後備兵力與民間人員組成之志願團隊，以迅速並在充分的人身保護下進入受災區域執行任務。為增進效能，我國將尋求與外國進行雙邊或多邊相關聯合演訓之機會，並規劃興建一艘1萬噸級醫療艦，用於提供國內離島居民與外國民眾在平時與災時的醫療協助，也規劃將太平島建設成為海外人道救援與災害防救任務的前置基地。

拯救生命是國防的終極目的，是維護持續和平的正道，是普世的價值。正因如此，國軍在人道救援與災害防救任務得以更加確證其存在的意義。

蔡英文

新境界文教基金會 董事長

The first imperative is the establishment of the “Asia Pacific Humanitarian Assistance Platform (APHAP)”. The APHAP will be sponsored by the Ministry of Foreign Affairs, operated jointly by non-governmental organizations with FHA/FDR experience, and supported by FHA/FDR related ministries and agencies. The APHAP is designed to promote personnel exchange, experience sharing, and consensus building among Taiwanese and other related public and civil sectors in regional nations, and to actively reinforce FHA/FDR efforts conducted by foreign institutes such as the ASEAN Humanitarian Assistance Centre, Japan’s Japan-ASEAN Integration Fund, or the United States Agency for International Development.

The second imperative is to significantly elevate the FHA/FDR related capabilities and sophistication of our armed forces, Coast Guard Administration and other agencies. The frequency of FHA/FDR related training and exercise should be intensified, the delivery capacities of our airlift and sealift operations could be increased, and operational sustainability needs to be lengthened. Furthermore, a volunteer task force, made up of reserve and civilian components in combination with proper personal security protections, will be tasked with and quipped for rapid entry into affected areas to fulfill FHA/FDR missions. To improve our FHA/FDR effectiveness, Taiwan will seek out possible participation in bi- or multi-lateral training and exercises. For the same purpose, we plan to build a 10,000ton hospital ship to provide medical assistance to our off-shore islanders and foreign population in peacetime and crisis response. Meanwhile, we plan to construct Taiping (Itu Aba) Island as the forward base for FHA/FDR missions.

Saving lives is a universally cherished value and the ultimate objective of our national defense, as well as the sure path to a lasting peace. For precisely this reason, the humanitarian assistance and disaster relief missions further validate the rationale for the existence of our armed forces.

Ing-Wen Tsai

President, New Frontier Foundation

摘要

臺灣必須採取務實的態度，採取均衡的策略因應傳統與新興的安全威脅。國軍執行海內外人道救助與災害防救任務有其必要性與戰略上的重要性，但臺海軍力失衡對我國家存在所構成的險峻情況是具體且立即的，國軍建軍備戰的核心任務不容稍有鬆懈。而同時，人道救援與災害防救任務人力需求龐大，且須複雜之跨部會、軍文、中央／地方政府的（海外人道救援與災害防救甚至需要跨國的）協調整合。財力有限且現役部隊正在兵力精簡中的國軍，必須尋求組織、科技與部署方式上的創新，以在不影響戰備與現有法制架構的前提下，達成任務。這些是動用國軍執行海內外人道救助與災害防救任務時必須加以正視並加以克服的風險與挑戰。

國軍在人力與物力上的豐沛能量，能夠在災害預防、應變與復原重建等災害防救各階段扮演重要的角色外，其快速反應的能力，對撤離或拯救受災民眾的急迫性任務，更具有關鍵性的作用。未來，天災災情的加劇是趨勢，國軍豐沛的能量與快速因應的能力將會是避免災情惡化為複合性災害的關鍵。在未來，國軍在災害防救任務的必要性與重要性不可避免地將日益提高。

除此之外，海內外人道救助與災害防救任務能讓軍隊與社會的距離拉近，對營造良好的軍民關係或塑造和平的安全環境，起間接的正面效果。

在五位來自不同領域專家的協助下，新境界智庫國防政策諮詢小組完成此一政策研究，並在報告中提出以下的建議：

- 一、檢討國軍災防兵力部署方式，避免過度動員、浪費資源；
- 二、強化災害的專業訓練，以質代量；清楚界定國軍在災防各階段任務之範圍，各機關災防能量分工合作；
- 三、動員後備部隊加入災防任務，培養常、後備部隊合作默契；

Summary

Taiwan should take a pragmatic approach and adapt a balanced strategy to respond both traditional and emerging security threats. Truly, there are necessary and strategic significances to justify our armed forces conducting local or foreign humanitarian assistance and disaster relief missions. Nevertheless, external threats against the survival of our nation are manifest in the increasing clear military imbalance across the Taiwan Strait. We do not have the luxury of ignoring high military readiness. Meanwhile, humanitarian assistance and disaster relief missions are manpower consuming and require complicated interagency, civil-military, and local/central governmental coordination. Our armed forces, conditioned by tight funds and force downsizing, must seek innovative approaches in organization, technology, and deployment in order to accomplish the mission without affecting readiness and infringing on their authorized responsibilities. These factors need to be deliberated and overcome when deploying the military in local or foreign humanitarian assistance and disaster relief missions.

Our armed forces with their considerable manpower and material capacities are capable of performing an important role in the prevention, response, and restoration stages of humanitarian assistance and disaster relief missions. Specifically, their rapid response capabilities proved crucial in evacuation and rescue the victims. In the future, the scale of disaster in Taiwan will be worsening; the considerable capacities and rapid response capabilities of the armed forces will be key factors in preventing the disaster from escalating into a compound disaster. In the future, the necessity and significance of military humanitarian assistance and disaster relief missions will become increasingly evident.

Besides, the mission such as humanitarian assistance and disaster relief -- be it local or foreign one -- plays a constructive role in bridging the gap between the armed forces and society. Such indirect, positive leverage generates decent civil-military relations and shapes a security environment towards peace.

Within assistance of five scholars experts from different fields, the Defense Policy Advisory Committee completes this policy research report and proposes the following policy recommendations:

1. To review our military's deployment in domestic disaster relief mission in order to prevent from over-mobilization and the inefficient use of resources;
2. To enhance professional disaster relief training and replace the mass by the quality; to clearly define the scope of the military's authorized tasks at different stages of the mission and promote an effective and proper division of labor among multiple governmental agencies with differing capabilities;
3. To mobilize reserve elements for disaster relief missions to cultivate habits of coordination between the regular and reserve forces in peacetime.

四、國軍執行災害防救任務所需作業費用應由中央政府統籌專款專用；

五、賦予國軍執行海外人道救援與災害防救更完備的法律授權；

六、完善海外人道救助與災害防救機制，強化跨部會合作，並結合民間非政府組織、新住民或外籍生等民間能量；

七、設立亞太人道救援平台，以促進國際合作；

八、興建一艘 1 萬噸級醫療艦，用於提供國內離島居民與外國民眾在平時與災時的醫療協助；

九、將太平島建設成為海外人道救援與災害防救任務的前置基地。



4. The operational expenditures of the armed forces in implementing disaster relief missions should be specifically earmarked in the central government budget;

5. More clarified authorization as to our armed forces to implement foreign humanitarian assistance and disaster relief missions.

6. To improve our response mechanism as to foreign humanitarian assistance and disaster relief. Interagency cooperation must be enhanced and civilian assets such as non-governmental organizations, new residents, or foreign students, should manage to integrate.

7. To establish the Asia Pacific Humanitarian Assistance Platform in order to further international cooperation;

8. To build a 10,000ton hospital ship to provide medical assistance to our off-shore islanders and foreign population in peacetime and crisis response;

9. To construct Taiping Island as the forward base for foreign humanitarian assistance and disaster relief missions



壹、必要性與重要性

軍隊執行海內外人道救助與災害防救任務常引發軍隊角色與任務的辯論，此一辯論涉及到民主制度的發展、軍事專業的內容與國家安全治理的理則等重大的軍文關係議題。傳統論者認為：軍隊的角色與任務在因應抵禦外在的軍事威脅，軍事能力在嚇阻、脅迫以及必要時在交戰中擊敗敵人，軍人的專業在紮實作戰整備以因應此等潛在威脅或實際狀況。任何會分散軍隊在建軍備戰專注力的工作，將會影響戰備與戰力，對確保國家安全免於外在的威脅有所負面的影響。而且，軍隊介入非屬建軍備戰的工作，將可能帶來政治發展的風險：軍人介入甚至於干預內政，將會損及文人統制，不利於民主制度，甚至於軍隊化社會，形成軍國主義。而且，以軍隊執行海外人道救助與災害防救任務，無疑是侵犯他國主權、干預他國內政，將會動搖國際社會的秩序與和諧。另一方面，創新論者認為：軍人是武裝公僕，軍隊與其他政府部門一樣，為社會福祉而服務，當社會遭受威脅或傷害，無論是威脅來源是外在還是內在、天然還是人為造成，軍隊都負有義務將此等威脅排除。特別是在第二次世界大戰之後，國際社會趨向穩定，縱有少數主權國家間的軍事衝突發生，但對絕大多數的國家，對其國家主權或生存的外在威脅可能性幾乎並不存在。因此，讓昂貴的軍隊的角色與任務只停留在應付發生機率極微甚至於零的戰爭，是資源的浪費。況且，許多新興威脅如天災、人為意外、傳染病、網路入侵與恐怖攻擊無國境之分，在全球治理的概念下，應當跨越主權的藩籬，動用一切可用的資源——包括各國的軍隊——來共同地因應。

臺灣必須採取務實的態度，在兩種論點間取得均衡。誠然，如同下述，國軍執行海內外人道救助與災害防救任務有其必要性與戰略上的重要性，但臺海軍力失衡對我國家存在所構成的險峻情況是具體且立即的，國軍建軍備戰的核心任務不容稍有鬆懈。而同時，人道救援與災害防救任務人力需求龐大，且須複雜之跨部會、軍文、中央／地方政府的（海外人道救援與災害防救甚至需要跨國的）協調整合。財力有限且現役部隊正在兵力精簡中的國軍，必須尋求組織、科技與部署方式上的創新，以在不影響戰備與現有法制架構的前提下，達成任務。這些是動用國軍執行海內外人道救助與災害防救任務時必須加以正視並加以克服的風險與挑戰。

I. Necessity and Significance

A debate about the role and mission of the armed forces often ensues when the military's deployment in humanitarian assistance (HA), disaster relief (DR), foreign humanitarian assistance (FHA), and foreign disaster relief (FDR) is raised. This touches on vital issues of civil-military relations, such as the development of democratic polity, the content of military profession, or the principle of national security governance.

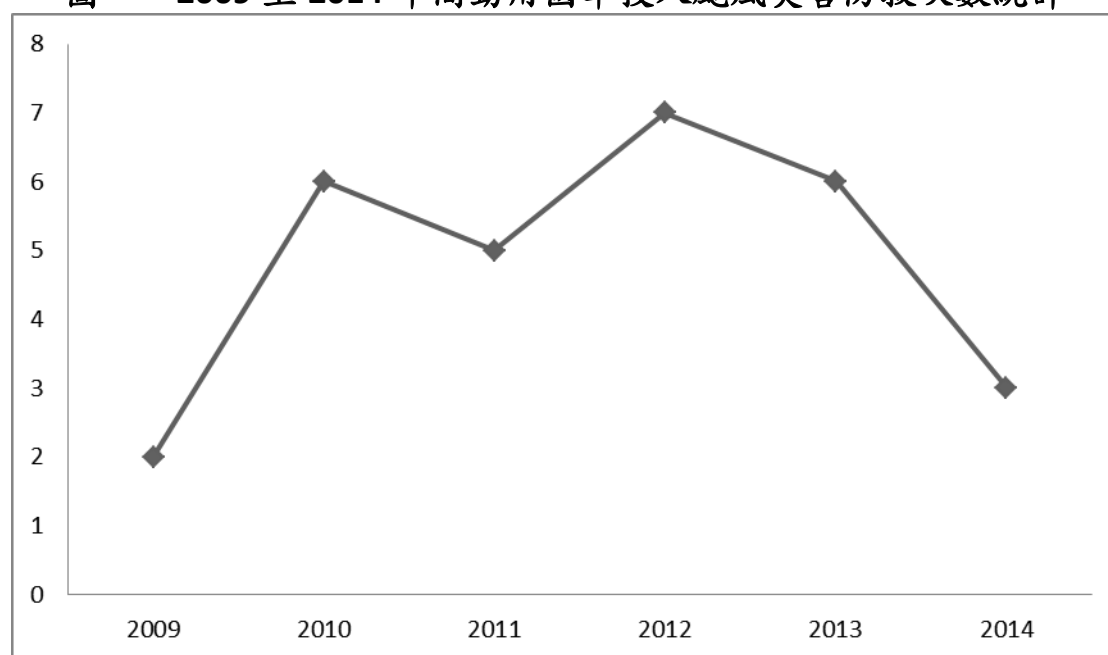
Traditionalists believe that the military's role and mission should be to respond to and defend against external military threats. Military capabilities are built to deter, coerce, or to defeat the enemy, if war erupts. The military profession is the combat ready commitment to respond to potential threats or actual contingencies. Any distraction from such a commitment will negate military readiness and capabilities and, as a result, hamper national security interests. Moreover, the military's engagement in non-combat affairs may bring about political development risks: military involvement or even intervention in internal affairs can override civilian control over the military, the bedrock of democracy, and, even worse, militarize the society leading to militarism. Military engagement in FHA/FDR missions will unequivocally violate the sovereignty of other nations and shake the order and harmony of international community. Innovators, on the other side, argue that soldiers are armed civil servants. The military acts, like other governmental sectors, to serve the welfare of society. The military is obligated to neutralize all threats against the society, be the external or internal, or caused by natural or man-made sources. Furthermore, the international community has increasingly stabilized after World War II. Though a few international military conflicts have occurred, for most nations in the world external threats to their national sovereignty and survival are virtually non-existent. It would be extravagance if the expensive military's sole focus were to be dealing with war whose prospect is dim if not nil. Besides, the concept of national border does not apply to many emerging threats such as natural disasters, man-made catastrophes, infectious diseases, cyber intrusion, and terrorist attacks. Based upon the principle of global governance, nations should go beyond the fence of sovereignty and respond to such threats jointly with all resources at hand, including their militaries.

Taiwan should take a pragmatic approach and manage to strike a sound balance between two extremes. Truly, there are necessary and strategic significances to justify our armed forces conducting local or foreign HA/DR missions. Nevertheless, external threats against the survival of our nation are manifest in the increasing clear military imbalance across the Taiwan Strait. We do not have the luxury of ignoring high military readiness. Meanwhile, HA/DR missions are manpower consuming and require complicated interagency, civil-military, and local/central governmental coordination. Our armed forces, conditioned by tight funds and force downsizing, must seek innovative approaches in organization, technology, and deployment in order to accomplish the mission without affecting readiness and infringing on their authorized responsibilities. These factors need to be deliberated and overcome when deploying the military in local or foreign HA/DR missions.

當國家遭遇重大變故（如暴亂、叛變、天災、意外事故、傳染病、網路入侵與恐怖攻擊），以致民眾生命財產受到威脅、關鍵基礎設施功能重創，社會秩序動亂，而政府文部門應變能量無法有效及時因應時，國家經常需要動用軍隊以恢復社會的安全與穩定。軍隊為了因應軍事作戰所準備的人力與物力能量，部份可以轉用於這些非軍事作戰的重大變故事件。對我國而言，需要動用國軍的重大變故類型主要為災害與傳染病的防救。

災害，根據「災害防救法」第二條的定義為：風災、水災、震災、旱災、寒害、土石流災害、火災、爆炸、公用氣體與油料管線、輸電線路災害、礦災、空難、海難、陸上交通事故、森林火災、毒性化學物質災害等類型。其中颱風是最常動用國軍防救的災害類型，根據內政部消防署的資料，自 2009 年迄今，計 29 次，平均每年將近 5 次颱風災害防救動用到國軍，且多集中於每年六至十月間颱風季節。大多數的颱風災害防救案例中，國軍動用（含待命、預備與預前部署兵力）人數常動輒高達 3 萬人以上，超過警察、消防與海巡等單位。以最近的鳳凰颱風（2014 年九月）為例，國軍待命兵力達 4 萬餘員，輪車 2358 輛、甲車 265 輛、飛機 15 架、舟艇 221 艘、各型重機具 1,495 部，以及抽水機 494 部。

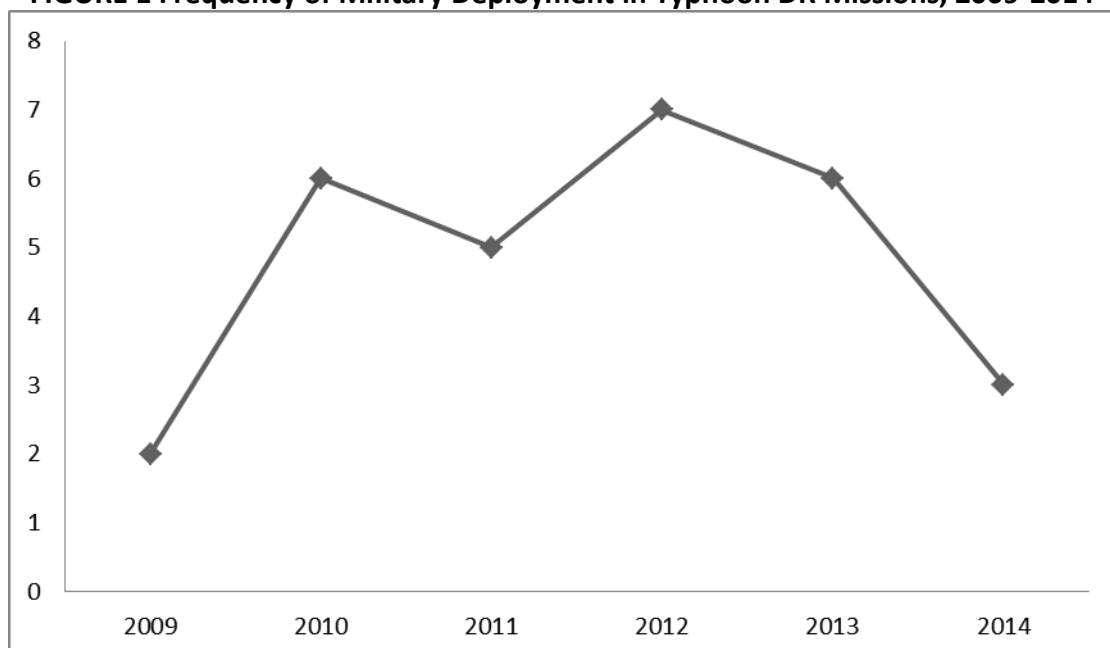
圖一 2009 至 2014 年間動用國軍投入颱風災害防救次數統計



When major incidents erupt, e.g. mass riots, revolts, natural disasters, man-made catastrophes, infectious disease epidemics, cyber intrusions, or terrorist attacks, they threaten the people's lives and property, damage vital functions of critical infrastructure, and disrupt social order. When other governmental sectors fail to respond in an effective and timely manner, the military are frequently called upon to re-establish society's security and stability. The comparatively huge manpower and material capacities that the military possess for war-fighting purposes can be, at least partly, converted into considerable assets in dealing with contingencies other than war. In Taiwan, the well-known types of such incidents that require the deployment of armed forces are disasters and infectious disease events.

Disaster, according to the definition provided in Article II of the Disaster Prevention and Protection Act, includes hazards caused by natural disasters (windstorms, flooding, earthquakes, droughts, hard freezes, landslides), fires, explosions, public gas, fuel pipe line and power transmission line failures, mining disasters, air crashes, shipwrecks, land traffic accidents, forest fires, toxic chemical material disasters. Among these, typhoons are the most frequent type of disaster for which our armed forces deploy. Data from the National Fire Agency (NFA) of the Ministry of the Interior (MOI) shows that our armed forces have deployed in DR missions for 29 typhoons in total since 2009 (or approximately 5 per year on average). These missions are concentrated in the typhoon intense period from June to October. In most typhoon DR missions, more than 30,000 service personnel are deployed (including on-alert, reserve, and instant response elements); the size often exceeds those of police force, fire brigade, or coast guard. For example, some 40,000 soldiers were on alert in the DR mission of Typhoon Fung-wong (September 2014). Furthermore, the Ministry of National Defense (MND) also prepared 2,358 wheeled vehicles, 265 armored vehicles, 15 aircraft, 221 boats and vessels, 1,495 various heavy engineering equipment, and 494 water pumps for the mission.

FIGURE 1 Frequency of Military Deployment in Typhoon DR Missions, 2009-2014



除了颱風之外，地震與爆炸也是常見的國軍投入防救的災害類型。1999 年的導致 2 千餘人死亡的九二一大地震，國軍共投入 49 萬餘人次進行防救。2010 年三月的甲仙地震，國軍在 17 分鐘內迅速成立應變中心，災後五天內派遣兵力 1 千 8 百餘人次、飛機 15 架次、各式車輛、機具 118 輛次投入救援工作。2014 年 7 月造成 32 人死亡高雄氣爆事件，國軍災防待命兵力達 1 萬 3 千餘員，半個月間派遣兵力 1 萬餘人次進入災區，工兵單位的生命探測器與化學兵單位的毒氣偵檢裝備充分發揮功效。在傳染病的災害防救方面，在 2003 年爆發的嚴重急性呼吸系統綜合症（SARS）疫情，國軍不僅立即調度軍醫單位醫護人員投入疫情控制外，也撥出 9 處營區提供作為強制隔離區。

臺灣將面臨天災災情日益加劇的危機，國軍在災害防救上快速應變的能力將更會是避免災情惡化為複合性災害的關鍵

這些案例顯示，國軍在人力與物力上的豐沛能量，能夠在災害預防、應變與復原重建等災害防救各階段扮演重要的角色外，其快速反應的能力，對撤離或拯救受災民眾的急迫性任務，更具有關鍵性的作用。而根據 2012 年行政院發佈的《國家氣候變遷調適政策綱領》評估氣候變遷對臺灣的衝擊，指出：

未來氣候變遷帶來的最大衝擊與挑戰就是原本常態性的災害，包括水災、土石流、旱災等，將會巨大化，很可能形成摧毀性的巨災，造成更嚴重的損害。若無法採取積極作為，在最短的時間內，克服巨災造成的破壞，將使得災期延長，巨災將轉變為複合性的災害，嚴重破壞原有的自然生態、人文社會結構，造成無可彌補的傷害。因此，我們必須嚴肅審視未來的衝擊與挑戰。¹

若臺灣在天災災情的加劇是趨勢，國軍豐沛的能量與快速因應的能力將會是避免災情惡化為複合性災害的關鍵。在未來，國軍在災害防救任務的必要性與重要性不可避免地將日益提高。

¹ 行政院經濟建設委員會，《國家氣候變遷調適政策綱領》，2012 年，頁 14。

In addition to typhoons, earthquakes and explosions are also two common types of disaster that require the military's DR mission. The military committed a combined headcounts of 490,000 in the DR mission for the 921 earthquake (September 1999), a calamity which caused some 2,000 deaths. When the Kaohsiung earthquake hit Taiwan in March 2010, the military responded rapidly: the crisis management center was set up within 17 minutes of the earthquake. Approximately 1,800 people, 15 aircraft, and 118 various vehicles and equipment were assigned to the DR mission within five days. In the recent July 2014 Kaohsiung gas explosion incident which caused 32 deaths, the military's on-alert forces reached some 13,000 soldiers, over 10,000 people were assigned to the affected area within half a month. Much of the equipment, such as life detectors from the engineer units or gas detectors from the chemical units, performed quite well. The SARS case of 2003 was an example of the military's DR mission against infectious disease. The military not only deployed its medical units in fighting SARS but also provided 9 camps for forced quarantine.

Taiwan faces a coming crisis in that the scale of natural disasters will increasingly worsen. The military's rapid response capabilities in DR missions will be key factors in preventing a disaster from escalating into a compound disaster

These cases show that our armed forces with their considerable manpower and material capacities are capable of performing an important role in the prevention, response, and restoration stages of DR missions. Specifically, their rapid response capabilities proved crucial in evacuation and rescue the victims

in the affected areas. According to the Executive Yuan's *Adaptation Strategy to Climate Change in Taiwan*,

The most serious impact climate change brings will be turning regular scale disasters, such as floods, mudslides and droughts, into destructive catastrophes. If we do not take any action and try to recover in the shortest time from the damage the catastrophe has caused, it will turn into compound disasters and swiftly destroy the island's ecosystem and its civilization. Therefore, we must carefully inspect the coming impacts and challenges.¹

If the scale of disaster in Taiwan keeps worsening, then the considerable capacities and rapid response capabilities of the armed forces will be key factors in preventing the disaster from escalating into a compound disaster. In the future, the necessity and significance of military DR missions will become increasingly evident.

¹ Council for Economic Planning and Development, Executive Yuan, *Adaptation Strategy to Climate Change in Taiwan*, 2012, p. 16.

軍隊投入災害救援任務除了可迅速恢復社會穩定與安全外，亦被視為是軍隊凝聚內部團結、贏得外界民心的重要方式。在 2009 年的莫拉克風災，國軍縱令因為中央指揮系統延宕而反成為代罪羔羊，但國軍在此次任務中的不凡表現，在災民甚至官兵心中留下深刻的印象。國防部曾於 2010 年針對此次災害防救出版了一本口述歷史，訪談了從 30 餘位將領到士兵的救災感想，其中有一段，生動地記敘了災害防救任務所帶來的正面附加效益。巫尚儒，1966 年生，受訪時是聯勤（現已裁撤）第四地區支援指揮部南部地區補給庫左營補給分庫的少校副分庫長，莫拉克風災時率部進入旗山災區，支援擔任清淤的海軍陸戰隊的後勤事宜，包括提供新式的沐浴機供災民與救災官兵使用。根據他的敘述：

有位先生是擺攤賣車輪餅的，他發現陸戰隊住在〔旗山國小〕，每天都會帶很多車輪餅來免費給陸戰隊弟兄們吃。他說這些車輪餅都是賣剩下的，但是從數量上看我們都可以推測他其實說的是客套話，因為他怕弟兄們不會接受這些用來勞軍的車輪餅。

另外，我們分庫有位資深士官長，年紀較大且患有痼疾，這次到旗山恰好他帶的藥吃完了，便到街上的藥房去買藥，藥房老闆把藥給他卻拒收他的錢，老闆說：「你們是來幫我們的忙，怎麼還能跟你們收錢呢？」原本我們常說的「軍愛民、民敬軍」在這次水災中就充分表現出來。

陸戰隊的團隊精神也令人佩服！〔有次部隊忙到晚上才回來，新式沐浴機已無災民使用，我們請陸戰隊弟兄們使用比較舒適又兼顧隱私的沐浴機〕，他們卻說從部隊主官以下不分彼此，大伙早已習慣一起洗，部隊感情如此融洽、心手相連，不會因階級高低而有所不同，讓我深感能夠在這樣的部隊服役，縱使只是短暫的義務役都會覺得很榮耀，那將會是一段令人永遠懷念的回憶。¹

¹ 國防部，《風雨見真情：國軍八八水災救災實錄》，2010 年，頁 258。

The military's DR missions not only serve the rapid recovery of social stability and security, they are important approaches to strengthening coherence within units and winning the support of the population. In the case of Typhoon Morakot (2009), though the armed forces turned out to be the scapegoat of the inaction of central DR command authorities, their outstanding performance in the mission marked profound images in the minds of soldiers and the people in the affected area. The MND interviewed some 30 military personnel, from general to file and rank, and published an oral history of the DR mission. One of the stories vividly narrates what positive side-effects DR missions may bring about. Wu Shang-ru, born in 1966, a major and deputy commander of Zuoying Supply Sub-Depot, Southern Area Supply Depot, the Fourth Theater Support Command, Combined Logistics Command (now disbanded) when interviewed, led his units into the affected Cishan area during the DR mission of Typhoon Morakot. His main task was to provide logistical support for Marine Corps elements who were responsible for mud cleaning and new bathing machines for soldiers and the people in the affected area. According to his account,

A choux pastry street vendor visited our position [at Cishan Primary School] every day and offered pastries to our marines for free. He said these pastries were only leftovers. But he provided so many that we could tell it's a white lie because he was afraid that our men might refuse to be gifted.

Moreover, there was one senior sergeant in my unit who suffered a chronic illness. He ran out of his prescription medicine shortly after we arrived at Cishan. He went to a local pharmacy to buy new medicine. The shop owner gave him the medicine but declined his money. He said, "You come to help us. How can I charge you?" "The military loves the people, the people respects the military," an old motto now fully manifested itself.

The team spirit of the Marine Corps was so impressive! [One day, the marines returned very late. No civilian in affected area was using the new portable shower rooms. We offered the marines to use these new shower rooms with better privacy and convenience.] They replied they were used to taking baths all together without distinguishing the ranks. I felt it was an honorable experience to serve in a unit that has such a strong and harmonious team spirit, working hand-in-hand regardless the ranks – even only for a brief conscription term. That will be a memory that one never forgets.¹

¹ MND, *Sincerity in Heavy Storm: An Oral History of the Military's Disaster Relief Mission in Typhoon Dorakot*, 2010, p. 258. Original in Chinese.

巫少校在妻子剛分娩的第二天便趕回部隊執行救災任務，一個月後才得以返家，不能像一般的丈夫守護妻子度月子，他感到遺憾與抱歉。但這一個月的救災任務，讓他跟這片土地與民眾建立了更深的情感。

這次救災讓我們對旗山、甲仙等地有了深厚的感情。我想等孩子再大一點，一定要帶他們回去看看。我想去看看那些曾經協助我們的鄉親、靈隱寺的住持〔當巫少校部隊進入小林村擔任大體挖掘時，借住該寺香客客房〕，了解他們的近況。這對孩子們來說是一個很好的機會教育，讓他們學習如何在大自然面前保持謙卑，並培養民胞物與的胸懷。¹

這種對這片土地與民眾的情感連結回答了所有針對國軍「為何而戰，為誰而戰」的質疑，這種價值與認同正是臺灣社會對國軍的期待。

而海外人道救援與災害救助更具有化敵為友的戰略意涵。2004年南亞海嘯後，美國的人道救援與災害防救行動使得當地民眾對於美國的印象明顯改觀，甚至包括對美國人一向沒有好感的回教國家印尼，對美國的好感度從 15%，跳升到 79%。二艘白色艦身塗裝的美軍醫療艦（不同於一般灰色塗裝的戰鬥艦隻）慈悲號（USNS MERCY, T-AH-19，負責太平洋、印度洋地區）與安慰號（USNS COMFORT, T-AH-20，負責大西洋地區），已成為美國「醫療外交」標竿。它們每

藉由醫療外交，兩艘美軍醫療艦的戰略效益，超過砲艦外交的任何戰鬥艦隻

次靠泊所提供的醫療協助，具有強大的宣傳效果，帶來深遠的戰略效益。²二艘醫療船所贏得的外國民眾對於美國的支持，超越了

美國海軍史上任何「砲艦外交」所部署的戰鬥艦隻。

¹ 國防部，《風雨見真情：國軍八八水災救災實錄》，2010年，頁261。

² Charles M. Perry, Marina Travayiakis, Bobby Andersen, and Yaron Eisenberg, *Finding the Right Mix: Disaster Diplomacy, National Security, and International Cooperation* (Washington D.C.: Institute for Foreign Policy Analysis, 2009), pp. 54, 56.

Major Wu had rushed back to his unit to conduct this DR mission on the second day when his wife was in labor and wasn't able to return home until one month later. He felt sorry for not being able to care for his postpartum wife as other husbands do. But this one-month DR mission made him develop a deeper emotional connection with this land and the people.

After this mission, we have deeper feelings about the Cishan and Jiasian areas. When my children grow up, I will bring them back there. I want to see those country men who assisted us and the abbot at Lingyin Temple [when Wu's unit was tasked to the most affected area, Xiaolin Village, to discover the remains of the victim villagers buried under mud, the Temple offered them residence]. I want to know how they are doing. For children, that will be a great opportunity for learning. They need to learn that humans should keep humble in the front of great Nature and develop a sense of compassion for all.¹

This emotional connection with this land and the people answers all doubts in the military as to “what we fight for, who we fight for.” Such a value and identity are exactly what Taiwan's society expects from our national armed forces.

Moreover, the FHA/FDR missions have strategic significance in lessening hostility and growing friendship. After the South Asian tsunami of 2004, the United States FHA/FDR missions significantly changed the perception of the local population to-

Through health diplomacy, the strategic significance of two U.S. hospital ships exceeds those of any combat vessels in gunboat diplomacy

wards the Americans. In the Islamic nation Indonesia where the image of America has been always tarnished, the favorable views of America jumped from a low of 15 percent to a high of 79

percent of those polled after the U.S. tsunami FDR efforts. The U.S. Navy's two, large, white-hulled (different from the painted-in-grey combat vessels) hospital ships, USNS MERCY (T-AH-19, mainly responsible for the Pacific and Indian Oceans) and USNS COMFORT (T-AH-20, mainly responsible for the Atlantic Ocean), the icons of U.S. “health diplomacy,” serve as highly visible and memorable symbols of American goodwill and capacity to help, generating considerable strategic interest and publicity wherever they go.² The public support these two hospital ships have won in foreign countries exceeds that any combat vessels could get from the deployment of “gunboat diplomacy” in the history of the U.S. Navy.

¹ MND, *Sincerity in Heavy Storm: An Oral History of the Military's Disaster Relief Mission in Typhoon Dorakot*, 2010, p. 261. Original in Chinese.

² Charles M. Perry, Marina Travayiakis, Bobby Andersen, and Yaron Eisenberg, *Finding the Right Mix: Disaster Diplomacy, National Security, and International Cooperation* (Washington D.C.: Institute for Foreign Policy Analysis, 2009), pp. 54, 56.

簡言之，動用軍隊執行海內外的人道救助與災害防救任務，不僅具有恢復安全與穩定的直接效應，更能讓軍隊與社會的距離拉近，對營造良好的軍民關係或塑造和平的安全環境，起間接的正面效果。

貳、國軍執行國境內災害防救任務

1999 年的九二一地震與 2009 年的莫拉克風災促發了臺灣在國內災防機制上的改革，特別是中央與地方政府在災防意識與準備上均有了長足的進步。後者導致「國防法」的修法，將災害防救列入國軍的任務中，在過去數年間，國軍相關的裝備、部署與程序均有顯著的進步。國軍是中央政府的資產，而地方政府是執行災防的前線，地方／中央政府的協調整合程度，攸關國軍在災防任務的效能發揮。聯絡官的設置、各種災害防救兵棋推演及實兵演練等等精進措施，有助於地方／中央政府對災防兵力運用的協調。劉建忻，前研考會（現併入國家發展委員會）副主委、現任台南市政府副秘書長，以其在中央與地方政府都服務過的經驗，有以下公允的評價：

地方政府相當重視國軍的防救災力量，協力機制的運作皆堪稱順暢；國軍在歷次執行災害緊急應變及災後復原重建工作時，也都獲得普遍好評。¹

劉副秘書長從地方政府的角度提出幾點精進的建議（見附件一），要點在藉由縮短兵力支援申請作業流程、提高部署方式的彈性以及擴大部署重型機具，在有限人力資源前提下，增加災防效能。

而國防小組在研究過程中也發現國軍在災防任務部署方式上確實有若干可以精進之處：

¹ 見本報告附件一。

In short, the deployment of the military in local or foreign HA/DR missions not only directly contributes to the recovery of security and stability but also plays a constructive role in bridging the gap between the armed forces and society. Such indirect, positive leverage generates decent civil-military relations and shapes a security environment towards peace.

II. Homeland Disaster Relief

The 921 Earthquake in 1999 and Typhoon Morakot in 2009 prompted reforms to the DR mechanism in Taiwan, and especially resulted in significant improvements in the DR awareness and preparation of the central and local governments. The latter also led to the amendment of National Defense Act, adding disaster relief and assistance as one of the missions of the armed forces, and there has been substantial progress in related improvements of equipment, deployment, and procedure over the past few years. While the national armed forces are assets of central government, it is the local governments that stand at the front line of DR missions. Therefore, the degree of coordination and integration between local and central governments is critical for determining military's operational effectiveness in DR missions. The assignment of liaison officers, as well as various DR simulations and field exercises, are all helpful for improving the coordination between the local and central governments in deploying military forces. Liu Chien-sin, former Deputy Minister of the Research, Development and Evaluation Commission (now integrated into National Development Council), Executive Yuan and now Deputy Secretary General of Tainan City Government, makes the following fair assessment based upon his experience served in both central and local governments:

Local government pays considerable attentions to the DR capacities of our national armed forces, and the coordination mechanism generally operates smoothly. Historically, the performance of our national armed forces in implementing emergency response in disaster or post-disaster restoration and reconstruction receive widespread positive comments.¹

Speaking from the local government perspective, Deputy Secretary General Liu proposes several ideas for further refinements (see Addendum 1), with an emphasis on curtailing the time required for the process of requesting support from military forces, increasing the flexibility of DR deployments, and expanding the deployment of heavy engineer equipment, which would enhance the effectiveness of DR operations under conditions of limited manpower.

The Defense Advisory Committee (the Defense Committee in short) also identifies some recommendations for the military to improve the deployment in DR mission.

¹ See Addendum I of this report. Original in Chinese.

國防部目前所擁有的豐沛人力資源是因應災防任務時之相對優勢，但現況是：往往會過度動員、浪費資源；而未來的趨勢是：隨著兵力大幅精簡，此一相對優勢將會逐漸流失。因此，未來精進的方向：強化災害的專業訓練，以質代量；清楚界定國軍在災防各階段任務之範圍，各機關災防能量分工合作；動員後備部隊加入災防任務，培養常、後備部隊合作默契。

災害防救是人力需求甚鉅的任務，國防部經常動員可觀的兵力待命。以鳳凰颱風襲台（2014年）為例，中央氣象局在九月十九日上午八時許發佈海上颱風警報，晚間八時許發佈陸上颱風警報，同日國防部展開災防任務兵力整備。二十一日上午十時許鳳凰颱風襲擊臺灣。二十二日上午八時許海上颱風警報解除。根據國防部在中央災害應變中心的提報，在鳳凰颱風期間，國軍在臺灣本島地區人力部署如表一所示：

表一 國軍執行鳳凰颱風災害防救任務之兵力部署

	19日晚間	20日上午	20日晚間	21日上午	21日晚間	22日
第二作戰區 (東部)	*6,268	*6,268	*6,268	*2,153	*2,153	無資料
				300	*200	
			#272		#292	
第三作戰區 (北部)	*14,418	*14,418	*14,418	*7,594	*7,594	無資料
				300	*200	
			#20		#193	
第四作戰區 (南部)	*12,408	*14,418	*14,418	*23,584	*23,584	無資料
				300	*200	
			#343		#230	
第五作戰區 (中部)	*9,821	*9,821	*9,821	*3,184	*3,205	無資料
				300	*200	
			#4		#49	
(總計)	*42,915	*42,915	*42,915	*36,515	*36,536	無資料
				1,200	*800	
			#639		#764	

第二作戰區：花蓮縣、台東縣；第三作戰區：台北市、新北市、桃園市、宜蘭縣、新竹縣、基隆市；第四作戰區：高雄市、台南市、屏東縣；第五作戰區：台中市、苗栗縣、彰化縣、雲林縣、南投縣、嘉義縣、嘉義市。

以上數字不含空作部、艦指部、航特部災防任務人員。

* 為預置兵力 ** 為第二應變兵力（可於3小時內出動） *** 為第一應變兵力（可於10分鐘內出動） # 為動用執行任務兵力

The vast manpower that the MND now possesses is regarded as the military's comparative advantage to cope with DR missions. However, under the current conditions, over-mobilization and the inefficient use of resources become common phenomena. This comparative advantage will gradually diminish going forward as a result of the implementation of large-scale force downsizing programs. Thus, the directions for future refinement should be: to enhance professional DR training and replace the mass by the quality; to clearly define the scope of the military's authorized tasks at different stages of the DR mission and promote an effective and proper division of labor among multiple governmental agencies with differing capabilities; and, finally, to mobilize reserve elements for DR missions to cultivate habits of coordination between the regular and reserve forces in peacetime.

Because DR missions are highly manpower intensive, in instances where the occurrence of disaster can be roughly anticipated to allow for early preparation (such as typhoons), the MND prefers to place considerable forces on alert. In the case of Typhoon Fung-wong in 2014, when the Ministry of Transportation and Communication's Central Weather Bureau announced a sea alert at 08:00 and land warning at 22:00 on September 19th, MND began manpower preparations for the upcoming DR mission on the same day. Typhoon Fung-wong struck Taiwan Island at 10:00 on September 21st; CWB lifted the sea alert clear at 08:00 of the 22nd. According to data from the Central Emergency Operation Center, the MND DR manpower deployment on Taiwan Island during Typhoon Fung-wong period was as shown in Table 1.

TABLE 1 MND Manpower Deployment in Typhoon Fung-wong DR Mission

	Night, 19th	Mor., 20th	Night, 20th	Mor., 21st	Night 21th	22nd
2nd Theater (east)	*6,268	*6,268	*6,268	*2,153	*2,153	No data available
				300	*200	
			#272		#292	
3rd Theater (north)	*14,418	*14,418	*14,418	*7,594	*7,594	
				300	*200	
			#20		#193	
4th Theater (South)	*12,408	*12,408	*12,408	*23,584	*23,584	
				300	*200	
			#343		#230	
5th Theater (Central)	*9,821	*9,821	*9,821	*3,184	*3,205	
				300	*200	
			#4		#49	
(Total)	*42,915	*42,915	*42,915	*36,515	*36,536	Plan #980
				1,200	*800	
			#639		#764	

2nd Theater: Hualien and Taitung; 3rd Theater: Taipei, New Taipei, Taoyuan, Yilan, Hsinchu, and Keelung; 4th Theater: Kao-hsiung, Tainan, and Pingtung; 5th Theater: Taichung, Miaoli, Changhua, Yunlin, Nantou, Chiayi

DR mission personnel in Air Force Combatant Command, Naval Fleet Command and Special Forces Command/ Airborne are not included.

* forces on alert ** secondary response forces (ready to engage within 3 hours) *** prime response forces (ready to engage within 10 minutes) # forces engaged DR missions

換言之，在颱風襲台前兩天，即有約 20% 國軍官兵已進入災害防救任務待命狀態。然而，在這 4 萬多名待命官兵中，約 2 千名（佔待命官兵人數 4%）真正進入能即時（10 分鐘至 3 小時）部署的戰備狀態，而真正動用執行災防任務的每天約在 600 至 900 人次（不超過待命官兵人數 2%）。這可有兩種解讀：一個即是過度動員、資源浪費，國防部並不需要留守那麼多的官兵待命；另一個解讀是國軍的災防人力資源實在驚人，即便鳳凰颱風是臺灣在 2014 年最大的颱風襲擊案例，最多也只動用了 2% 的國防部應急兵力（或 0.4% 總兵力）。

數據也顯示國軍以軍事威脅導向的兵力部署方式在因應災害防救時的風險，為了抵抗可能的中國武力進犯，大部分的國軍（第三、四、五作戰區）都部署在臺灣本島西部，東部的兵力（第二作戰區）相對薄弱。「國軍協助災害防救辦法」規範以作戰區區分災防任務之責任地域範圍，使得位處較容易受到颱風侵襲的臺灣東部之第二作戰區，有兵力不足的風險。在鳳凰颱風的案例中，九月二十日（颱風襲台的前一日），第二作戰區真正動用執行災防任務的人次約佔該戰區待命人數的 4%，相較於第三、四、五戰區的比例（0.1%、2%、0.04%）都要高上許多。

低廉的人力成本——加上財力困難的地方政府無法依「國軍協助災害防救辦法」（第 16 條）支付國軍災防任務的作業費——或可部份解釋國軍動用重型機具時的猶豫。為了強化國軍在災防任務上的效能，國防小組建議：此一作業費宜由中央政府編列支付。

在災防任務中，許多低階的勞力密集工作（像是沙包堆置、居民撤離或清除淤泥等等），都是由國軍承擔。而國軍在志願役士兵逐漸增加之後，人力成本低廉的優勢也將逐漸消失。換言之，國軍常備部隊在未來災防任務上的責任，也應當從低階的任務逐漸轉型到需要複雜機具、專業訓練的高階任務，讓國軍儘管兵力減少，但仍更能發揮災防效能。傳統的勞力密集任務，則必須要思考由替代的兵力來源（如後備部隊）來補實。

In other words, approximately 20 percent of all service members nationwide were already on alert status. However, only 2,000 (or 4 percent) out of these some 40,000 DR mission-ready forces could be deployed in a timely manner (between 10 minutes to 3 hours), and only a small portion (600 to 900 person-times per day; no more than 2 percent of all mission-ready forces) actually engaged in DR mission. There are two possible interpretations of this data. The first is that the MND does not need to keep so many personnel on alert—this is simply over-mobilization and an inefficient use of resources. Alternatively, the total amount of resources and manpower that MND can dedicate to DR operations must be truly astounding, if a mere 2 percent of its operation ready forces (or 0.4 percent of total military forces) proved to be sufficient for successfully responding to Typhoon Fung-wong, Taiwan's biggest typhoon DR mission in 2014.

Also, data shows that Taiwan's threat-oriented force deployment may bring about operational risk in implementing DR missions. In order to defend against China's possible military invasion, most of our armed forces (3rd, 4th, and 5th Theater) are concentrated on the Western part of Taiwan Island while the forces located at the Eastern part (2nd Theater) are relatively thin. Since the Regulation on Military Assistance of Disaster Protection and Rescue allocates the DR missions areas of responsibility by theater, the 2nd Theater Command, located in the East where typhoons most frequently strike, runs the operational risk of being undermanned. During Typhoon Fung-wong, the proportion of the 2nd Theater Command's mission-ready forces that actually engaged in the DR mission on 20th September (one day before the typhoon hit) reached 4 percent, much higher than those of 3rd, 4th, and 5th Theaters (0.1 percent, 2 percent, and 0.04 percent respectively).

The military's reluctance to deploy heavy engineering equipment may be partially explained by relatively lower cost of deploying forces, combined with the inability of underfunded local governments to reimburse the central government for the operational expenditure of the armed forces in implementing DR missions in compliance with the Regulation on Military Assistance of Disaster Protection and Rescue (Article 16). In order to enhance the military's DR mission effectiveness, the Defense Committee suggests that expenditures of the armed forces in implementing disaster relief missions should be separately earmarked in the central government budget.

In DR missions, the responsibility for many low-end labor intensive tasks such as sandbag placement, civilian evacuation, and mud cleaning are borne by soldiers. However, as the proportion of volunteer soldiers in the armed forces gradually increases, the MND's comparative advantage of low cost manpower will be disappear. In other words, the DR responsibilities of the standing units of our national armed forces must be transitioned from low-end to high-end tasks requiring hi-tech equipment and professional training, so that even as the military downsizes, DR effectiveness will not be affected. Traditional labor-intensive tasks should be fulfilled by alternative source of manpower, such as reserve elements.

參、海外人道救助與災害防救任務

不同的哲學思考會改變觀念，從而改變作法。真正的軍事創新或軍事事務革命，都是從觀念開始。我們在其他國防政策藍皮書中所推動的改革議題，都是從觀念的改變開始。第六號報告《新世代的軍人》始於軍隊與社會關係的重建構，第七號報告《振興臺灣國防核心產業》從軍隊與產業關係著手，而此次的第八號報告《人道救助與災害防救》中所將要特別強調的海外人道救助與災害防救議題，開始於我們對於「和平」的思考。

臺灣人民愛好和平。但光「愛好」是不夠的、消極的，和平需要維持、經營，有時甚至需要創造。殺戮與暴力不會帶來和平，相互的協助建立相互的友誼，擴大友誼的對象、加深友誼的程度，形塑出有助於和平的環境。因此，和平並非不作任何事。作為國際社會的一份子，臺灣誠摯希望能夠貢獻一己之力於區域的穩定與和諧。

但可以預期的，中國的阻撓使得臺灣要加入任何具有主權國家意涵的國際合作活動或體制的政治困難度變高。但外交孤立的現實並不代表臺灣必然會孤立於國際社會。中國的阻撓不應影響到我們的動力，反而會刺激我們思考以更創新的途徑走進國際社會。

因此，以創新的途徑維持、經營與創造和平是國家安全與國防政策的主軸，而海外人道救助與災害防救任務就是一個好的切入點。

美軍慈悲號的戰略效應值得臺灣學習。況且，東亞地區是災害頻仍的地區。遭遇巨大災害時，受災國家往往難以自己因應，經常必須求助於來自國際社會的海外人道救助與災害防救的及時協助，政治考量因之降低，中國的阻撓只會引起國際社會的公憤。簡言之，海外人道救助與災害防救是臺灣維持、經營與創造和平的創新途徑。臺灣要被認為是負責而可被尊敬的國際社會一員與可靠的區域合作夥伴，我國政府與國軍應當重視這項任務。

III. Foreign Humanitarian Assistance and Foreign Disaster Relief

Different philosophies bring new ideas and ways of doing things. Genuine military innovations, or the so-called revolution in military affairs, start from such new ideas. Other reform issues in our previous defense blue papers were initiated by a change in ideas. *New Generation of Soldier*, Blue Paper No. 6, was generated by the re-construction of the relations between the armed forces and society. *Bolstering Taiwan's Core Defense Industries*, Blue Paper No. 7, began with the relationship between the armed forces and industries. In this *Humanitarian Assistance and Disaster Relief*, Blue Paper No. 8, the key issue, FHA/FDR missions, initiated with our thinking about "peace".

People in Taiwan love peace. But "love" alone is insufficient and inactive. Peace needs to be maintained, managed, or even created. Violence and killing will not bring about peace. Mutual assistance helps to build mutual friendship. An environment for peace can only be shaped and constructed when mutual friendship is expanded and deepened. Thus, peace cannot be achieved by doing nothing. As a member of the international community, Taiwan is sincere in its intention to contribute its assets for regional stability and harmony.

Due to China's intervention, the political obstacles to Taiwan joining in any "sovereignty implicated" international cooperative activities or institutes are high. Nevertheless, the reality of diplomatic isolation does not necessarily mean Taiwan must inevitably remain isolated. China's sabotage should not affect our momentum but rather force us to think of a more innovative approach to the international community.

Thus, innovative approaches in maintaining, managing, and creating peace should be the main theme of our national security and national defense policies. In this regard, FHA/FDR missions offer one such approach.

Taiwan should learn from the strategic significance of the USNS MERCY. Moreover, East Asia nations often suffer from disasters. Capacity deficits in the affected nations demand an international community FHA/FDR response to catastrophes. The urgency of these situations may be enough to de-emphasize political sensitivity to Taiwan's participation and make China's intransigence intolerable. In short, FHA/FDR missions provide an innovative approach for Taiwan to maintain, manage, and create peace. This is the field within which Taiwan can be seen as a responsible and respectable member of the international community and a reliable partner in the region. This is an issue about which Taiwan's government and its armed forces should be serious.

臺灣在國內的災害防救任務的準備與執行上有顯著的進步，但對於外交孤立的臺灣，海外人道救助與災害防救仍然是新興而未被廣為認知的任務。對於國軍來講，縱使沒有法律明文禁止執行海外人道救助與災害防救，但缺乏法律的授權將使得執行此類任務的效能受限。目前僅依「國際合作發展法」(2010年立法)第7條規定：「國際合作發展事務範圍如下：……二、對遭受天然災難或戰亂之國家及人民，提供人道援助。」的規定，並未提供國軍執行海外人道救助與災害防救的法律授權。

實務上，臺灣海外人道救助與災害防救最大動能仍來自民間的非政府組織，以2013年11月海燕颱風後對菲律賓的海外人道救助與災害防救任務觀之，截至2014年4月，臺灣民間捐款金額約449.26萬美元，物資約825.97萬美元，而臺灣政府提供的協助則動用國軍海、空軍協助將物資載往菲律賓，第一波派遣空軍18架次C-130運輸機，載運150公噸物資前赴災區，第二波再以海軍中和艦載運530公噸物資，外交部同時也協助國內民間團體如路竹會前往災區協助。換言之，救難物資的運送是國軍此次任務的主要責任，至於其他未透過政府機構的非政府組織或宗教團體，包括中華民國紅十字總會、佛光山、慈濟、台菲友好協會等，則各自進行人道救助與災害防救工作。

國際合作發展基金(由政府挹注資金，受外交部指導)是負責海外人道救助與災害防救計畫的主要機構。在執行此類任務時，受外交部指導，協調國防部等其他單位執行任務。國防小組評估：受限於人力不足且缺乏跨部會整合授權的國合會或甚至外交部，難以發揮海外人道救助與災害防救任務之效能，這或許可以解釋我國向以金援方式以盡海外人道救助與災害防救之目的。金援有其風險，鈔票不會講話，對爭取外國民眾對臺灣的好感也幫助有限。國防小組建議：如同下述，臺灣具有可觀的海外人道救助與災害防救能量，而在國內也累積了相當的災防經驗，為更有效達成預期的戰略效益，可以轉型基金，擴編為「亞太人道救援平台」。

Taiwan has made significant progress in the preparation and implementation of its domestic DR missions, but due to Taiwan's diplomatic isolation, the concept of the FHA/FDR mission has just started to emerge and is yet to be widely recognized. For our national forces, while there is no legal prohibition on engaging in FHA/FDR, the absence of legal authorization has limited the scope of FHA/FDR missions. According to Article 7 of the International Cooperation and Development Act (enacted in 2010): "International Cooperation and Development Services include:...(2) providing humanitarian assistance to the countries and people suffering from natural disasters or wars," which does not provide clear legal mandate for deploying military forces in FHA/FDR missions.

In practice, the bulk of Taiwan's efforts in FHA/FDR still come from the private sector, mainly non-government organizations (NGOs). The FHA/FDR operation of November 2013 Typhoon Swallow (Typhoon Haiyan) is a case in point. After the Typhoon Haiyan seriously damaged the Philippines, the amount of Taiwanese private donations for humanitarian assistance reached approximately USD\$ 4,492,600, in addition to supplies worth up to \$ 8,259,700 as of April 2014. The Taiwan government tasked the Navy and Air Force to assist with the delivery of materials to the Philippines. In the first wave, deployed Air Force C-130 transport planes carried out 18 sorties, delivering 150 tons of supplies for the disaster affected area. In the second wave, the Navy CHONG HO (LST-232) transported 530 tons of supplies. The Ministry of Foreign Affairs (MOFA) supported some Taiwanese NGOs such as Taiwan Root Medical Peace Corps in providing disaster assistance. In other words, the main task of Taiwan's military in this FHA/FDR mission was simply the transportation of supplies. Numerous NGOs or religious groups including the Red Cross Society, Fo Guang Shan, Tzu Chi, Taiwan and the Philippines Friendship Association, etc., found their own ways of assisting the affected people.

The International Cooperation and Development Fund (ICDF; MOFA funded NGO) has the main responsibility in the overall FHA/FDR program. In the implementation of FHA/FDR, the MOFA takes the lead to coordinate with the MND and other governmental agencies. The assessment of the Defense Committee suggests: neither ICDF nor MOFA can fully utilize Taiwan's considerable capacities in FHA/FDR missions due to a lack of manpower and mandate for interagency coordination. This may partly explain why Taiwan's government prefers to achieve the goal of FHA/FDR simply by providing financial aid. Financial aid has its own risks. Money can't talk. Financial aid doesn't help much in enhancing Taiwan's positive image among the affected population. The Defense Committee recommends: since Taiwan has credible capacities (as mention below) and great experience in DR missions, for the purpose of achieving desired strategic effectiveness, the ICDF could be transformed and expanded as a new Asia Pacific Humanitarian Assistance Platform (APHAP).

「亞太人道救援平台」仍由外交部出資，由具海外人道救援與災害防救相關經驗之民間非政府組織人員協同運作，並輔以我國與海外人道救援與災害防救各相關部會的協助。此一平台可整合國內相關資源，例如消防署位於南投的訓練中心(全球第三大災防訓練基地)——如同余君慧在她的文章中所強調的(見附件四)，以提供臺灣與亞太周邊國家相關海外人道救援與災害防救之公務與民間部門的人員交流、經驗學習與共識形成，並主動協助相關的組織如「東協人道救援中心」、日本的「日本—東協整合基金」或美國國際開發署在海外人道救援與災害防救任務上的執行。

在各國海外人道救助與災害防救任務中，軍隊均扮演著一定的角色。而國軍雖然經常投入國內的災害防救任務上，但討論國軍投入海外人道救助與災害防救任務時，最常被質疑的問題是：國軍有能力有效執行區域的海外人道救援與災害防救任務嗎？

答案是：有，非常自信地，有。臺灣具有充足的硬體能量，加上它在地理位置上的優勢，臺灣可以比起任何區域內的國家更有效地執行海外人道救援與災害防救任務。

臺灣具有可觀的戰力與武力投射能量。蘇冠群，年輕的國防分析師以生動的圖表針對我國與周邊各國(不含中國)在海、空運能量——海外人道救援與災害防救任務的指標性能力——作出比較，比較的結果回答了對於我國海空軍在海外人道救援與

災害防救任務能量上的質疑。

The APHAP will be sponsored by the MOFA, operated jointly by NGO personnel with FHA/FDR experience, and supported by FHA/FDR related ministries and agencies. The APHAP, by integrating all national DR assets such as NFA's training center at Nantou (the third biggest DR training base in the world) – as Joanna Yu Taylor emphasizes in her article (see Addendum 4), is designed to promote personnel exchange, experience sharing, and consensus building among respective public and civil sectors between Taiwan and the regional nations, and to actively reinforce FHA/FDR efforts conducted by foreign institutes such as the ASEAN Humanitarian Assistance Centre, Japan's Japan-ASEAN Integration Fund, or the United States Agency for International Development.

In FHA/FDR missions of various nations, militaries play significant roles. Even though our armed forces are frequently tasked in domestic DR missions, when it comes to the military deployment in FHA/FDR missions, the most recurrent question always is: are our armed forces capable to implement FHA/FDR missions?

The answer is yes, with a high degree of confidence. Taiwan possesses sufficient hardware capacities and geographical advantages that can make its FHA/FDR missions more effective than other nations in the region.

Taiwan possesses sufficient hardware capacities and geographical advantages that can make its FHA/FDR missions more effective than other nations in the region

The result of comparison may clear up any lingering doubts about the FHA/FDR capacities of our Navy and Air Force.

Taiwan's military has considerable combat power with considerable force projection capacity. Su Guan-chiun, a new-generation defense analyst, uses vivid illustrations to compare Taiwan's air- and sea-lift capacities and indicative capabilities in FHA/FDR missions with those of Asian nations (excluding China).

圖二 台日韓與東協十國海軍長距離兩棲運輸能量比較圖（汶萊、柬埔寨、緬甸、寮國無此能力不列入統計）

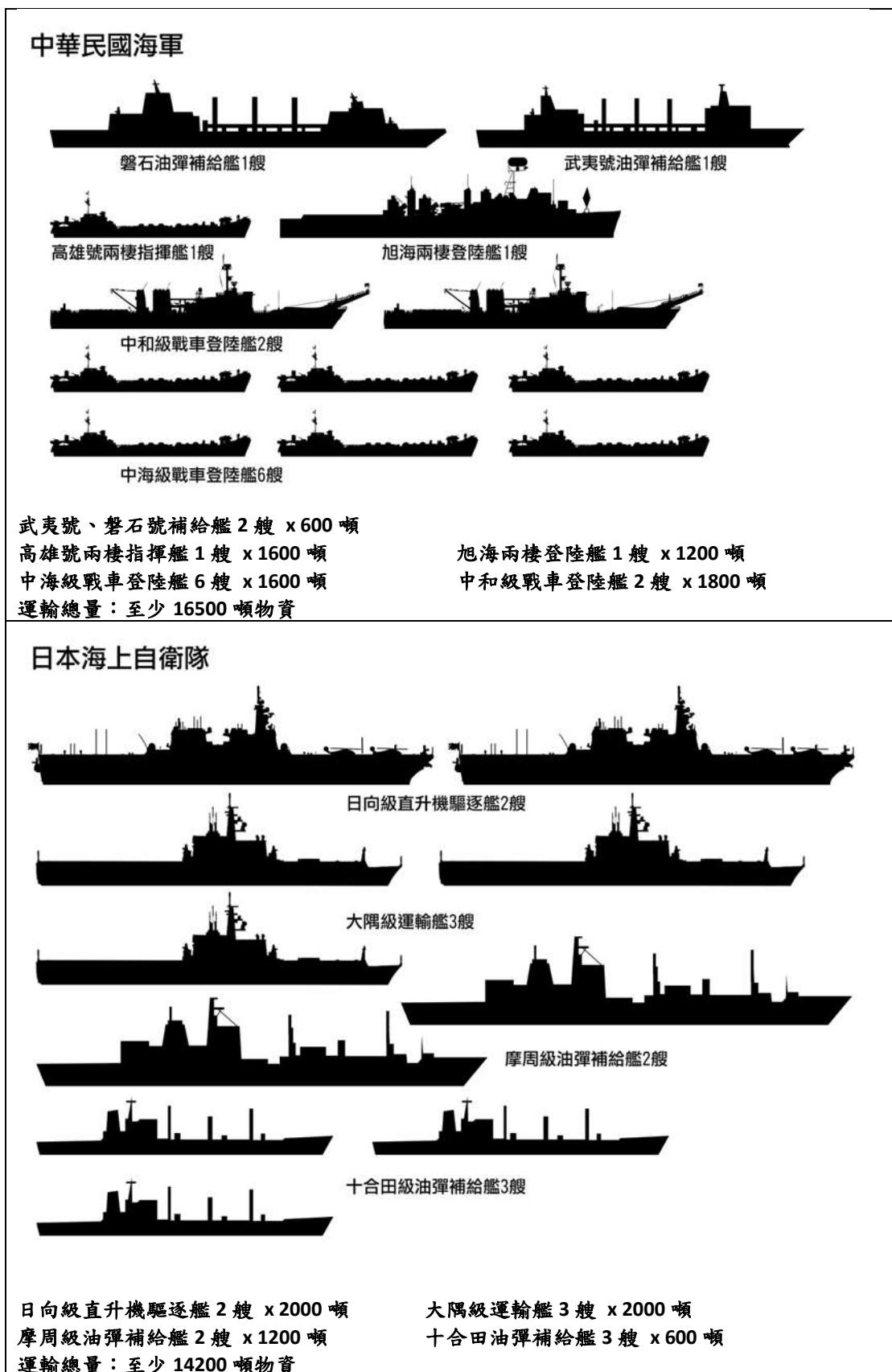
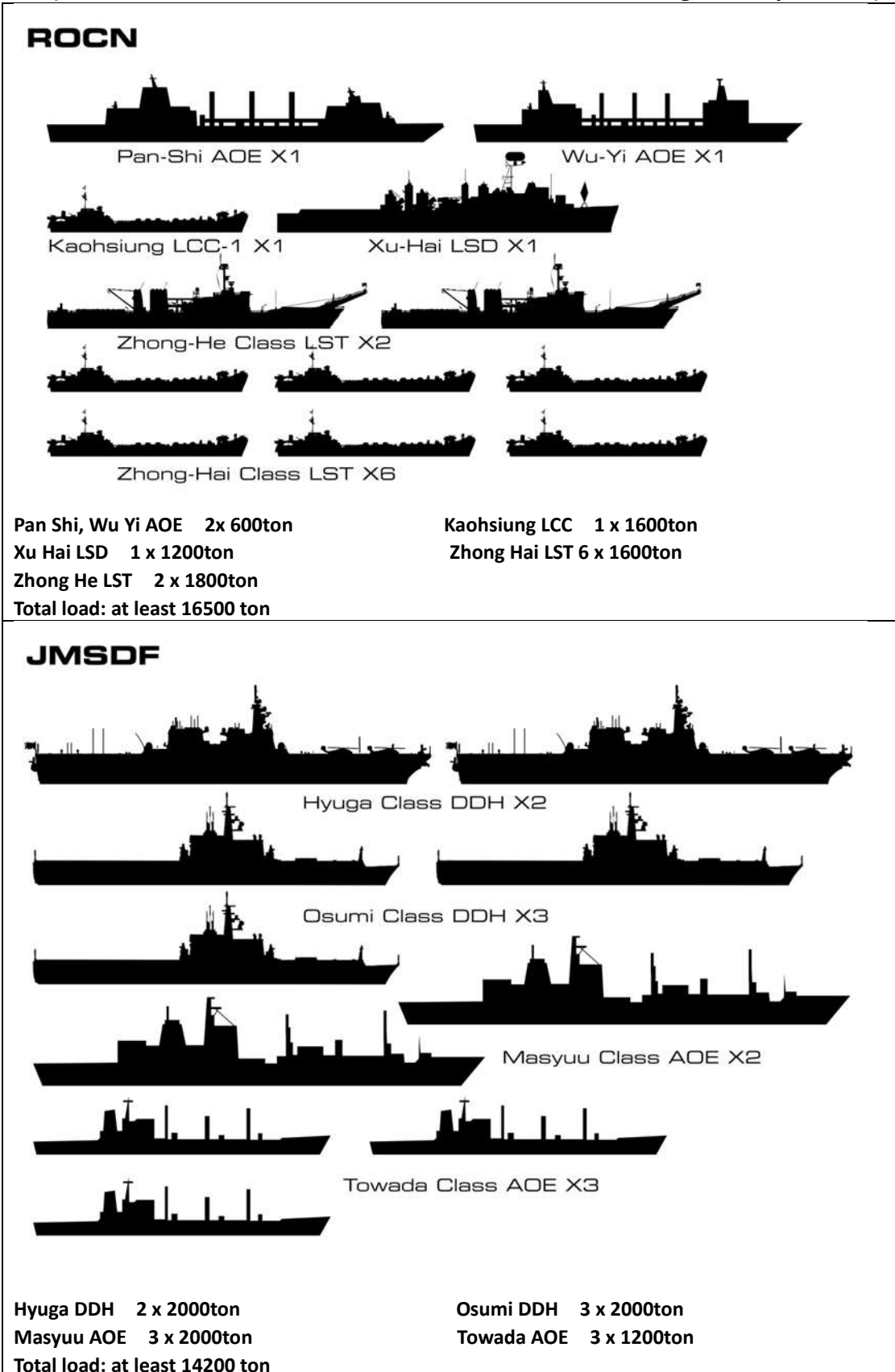


FIGURE 2 Comparison of Naval Long Distance Amphibious Transportation Capacities of Taiwan, Japan, South Korea and ASEAN 10 Nations (Brunei, Cambodia, Burma and Laos are excluded for lacking such capabilities)



大韓民國海軍



Dokdo class 兩棲突擊艦1艘



Cheonwangbong class 戰車登陸艦1艘



Kojoonbong class 戰車登陸艦4艘



Cheonji class 補給艦3艘

Dokdo class 兩棲突擊艦 1 艘 x 5000 噸

Kojoonbong class 戰車登陸艦 4 艘 x 1700 噸

Cheonwangbong class 戰車登陸艦 1 艘 x 2000 噸

Cheonji class 補給艦 3 艘 x 450 噸

運載總量：至少 15150 噸

印度尼西亞海軍



Makassar class 兩棲登陸艦4艘



KRI Dr. Soeharso 醫療船1艘



Teluk Semangka class 戰車登陸艦6艘



Teluk Amboina 戰車登陸艦1艘

Makassar class 兩棲登陸艦 4 艘 x 3000 噸

KRI Dr. Soeharso 號醫療船 1 艘 x 3000 噸

Teluk Semangka class 戰車登陸艦 6 艘 x 1800 噸

Teluk Amboina 號戰車登陸艦 1 艘 x 1800 噸

總載運量：至少 27600 噸

馬來西亞海軍



KD Mahawangsa 多用途支援艦1艘



KD Sri Indera Sakti 多用途支援艦1艘

KD Mahawangsa 號多用途支援艦 1 艘 x 1000 噸

KD Sri Indera Sakti 號多用途支援艦 1 艘 x 1000 噸

總載運量：至少 2000 噸

ROKN

Dokdo Class LPH X1



Cheonwangbong Class LST X1



Kojoonbong Class LST X4



Cheonji Class AOE X3

Dokdo LPH 1 x 5000ton

Cheonwangbong LST 1 x 2000ton

Total load: at least 15150 ton

Kojoonbong LST 4 x 1700ton

Cheonji AOE 3 x 450ton

Indonesian Navy

Makassar Class LPD X4



KRI Dr. Soeharso CRTS X1



Teluk Semangka Class LST X6



Teluk Amboina LST X1

Makassar LPD 4 x 3000ton

Teluk Semangka LST 6 x 1800ton

Total load at least 27600 ton

KRI Dr. Soeharso CRTS 1 x 3000ton

Teluk Amboina LST 1 x 1800ton

Royal Malaysian Navy

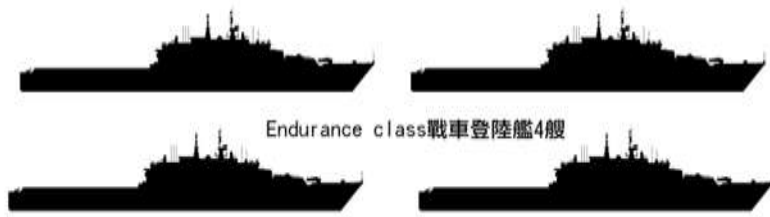
KD Mahawangsa MPCSS X1 KD Sri Indera Sakti MPCSS X1

KD Mahawangsa MPCSS 1 x 1000ton

KD Sri Indera Sakti MPCSS 1 x 1000ton

Total load at least 200 ton

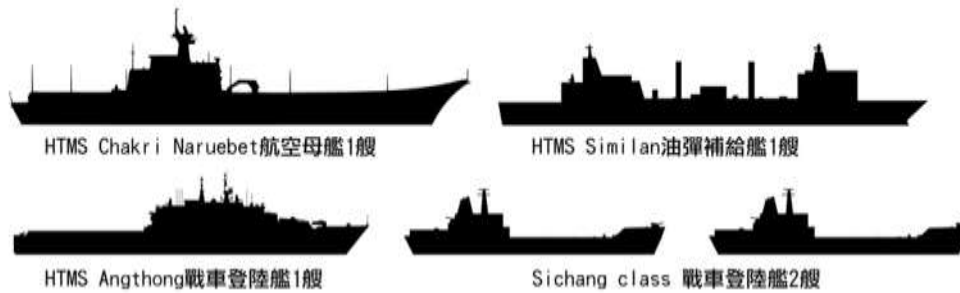
新加坡海軍



Endurance class 戰車登陸艦4艘

Endurance class 戰車登陸艦 4 艘 x 2000 噸
 總運載量：至少 8000 噸

泰國海軍



HTMS Chakri Naruebet 航空母艦1艘

HTMS Similan 油彈補給艦1艘

HTMS Angthong 戰車登陸艦1艘

Sichang class 戰車登陸艦2艘

HTMS Chakri Naruebet 號航空母艦 1 艘 x 2000 噸
 HTMS Similan 號油彈補給艦 1 艘 x 680 噸
 HTMS Angthong 號戰車登陸艦 1 艘 x 2000 噸 Sichang class 戰車登陸艦 2 艘 x 850 噸
 總載運量：至少 6380 噸

越南海軍

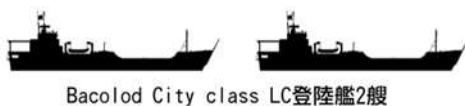


美造戰車登陸艦3艘

Polnochny Class 戰車登陸艦3艘

Polnochny Class 戰車登陸艦 3 艘 x 200 噸 美造戰車登陸艦 3 艘 x 1800 噸
 載運總量：至少 6000 噸

菲律賓海軍



Bacolod City class LC 登陸艦2艘

Bacolod City class 登陸艦 2 艘 x 2250 噸
 載運總量：至少 4500 噸

製作：蘇冠群

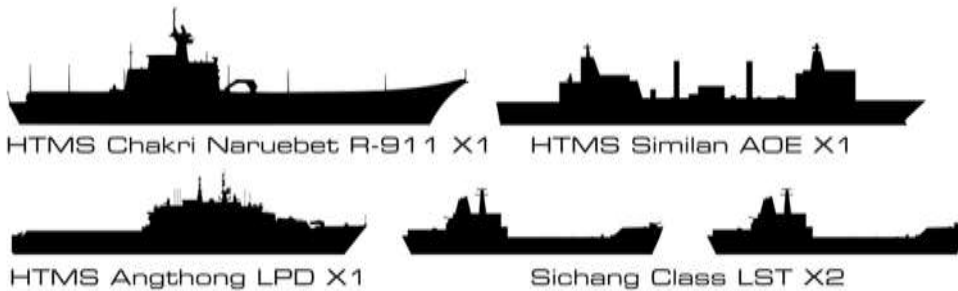
Singapore Navy



Endurance Class LPD X4

Endurance LPD 4 x 2000ton
Total load at least 8000 ton

Royal Thai Navy



HTMS Chakri Naruebet R-911 X1

HTMS Similan AOE X1

HTMS Angthong LPD X1

Sichang Class LST X2

HTMS Chakri Naruebet CVS 1x 2000ton

HTMS Similan AOE 1 x 680ton

HTMS Angthong LPD 1 x 2000ton

Sichang class LST 2 x 850ton

Total load at least 6380 ton

Vietnam People's Navy



LST Mk.3 X3

Polnochny Class LST X3

Polnochny Class LST 3 x 200ton

LST 3 x 1800ton

Total load at least 6000 ton

Philippine Navy

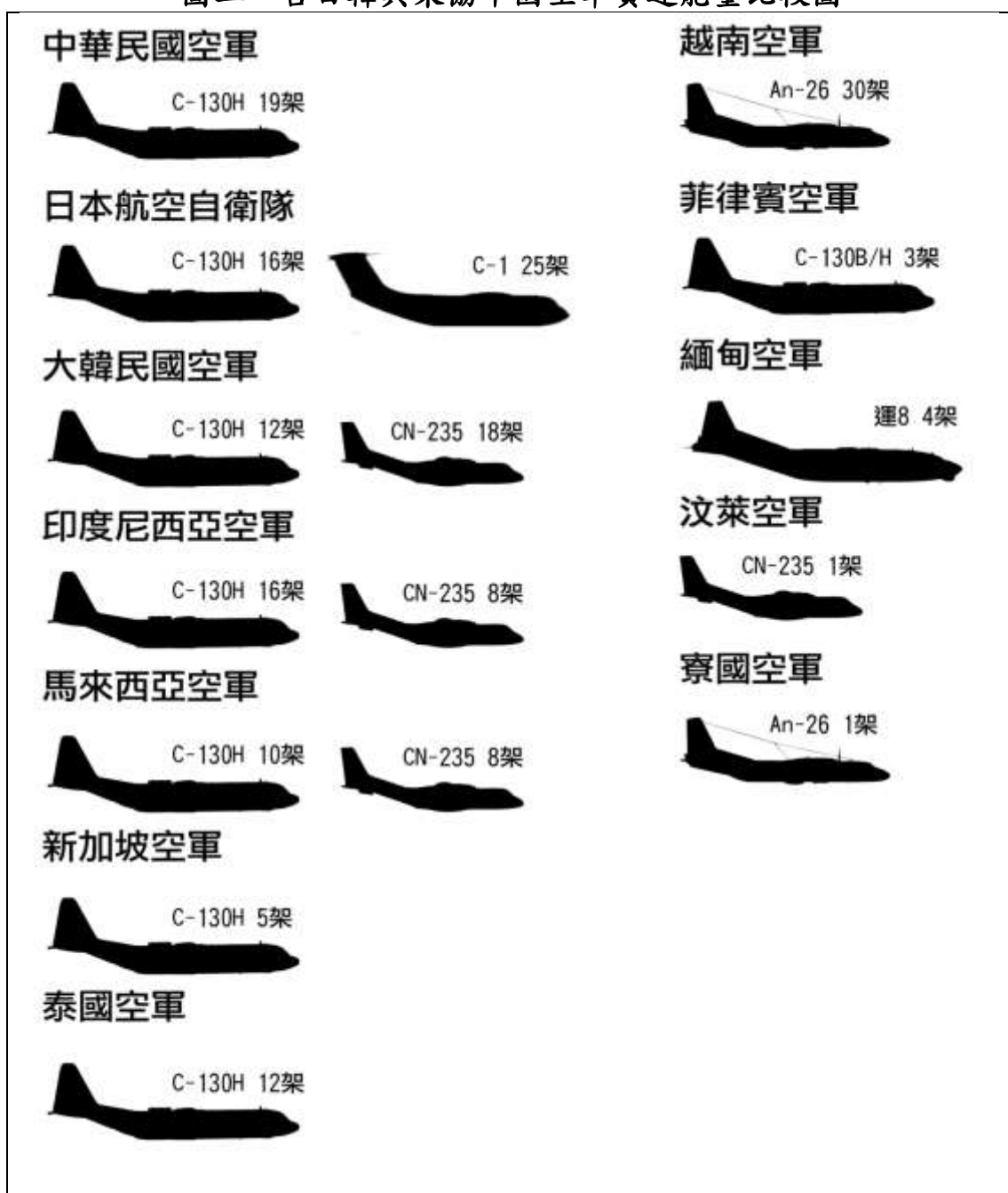


Bacolod City Class LC X2

Bacolod City class LC 2 x 2250ton

Total load at least 4500 ton

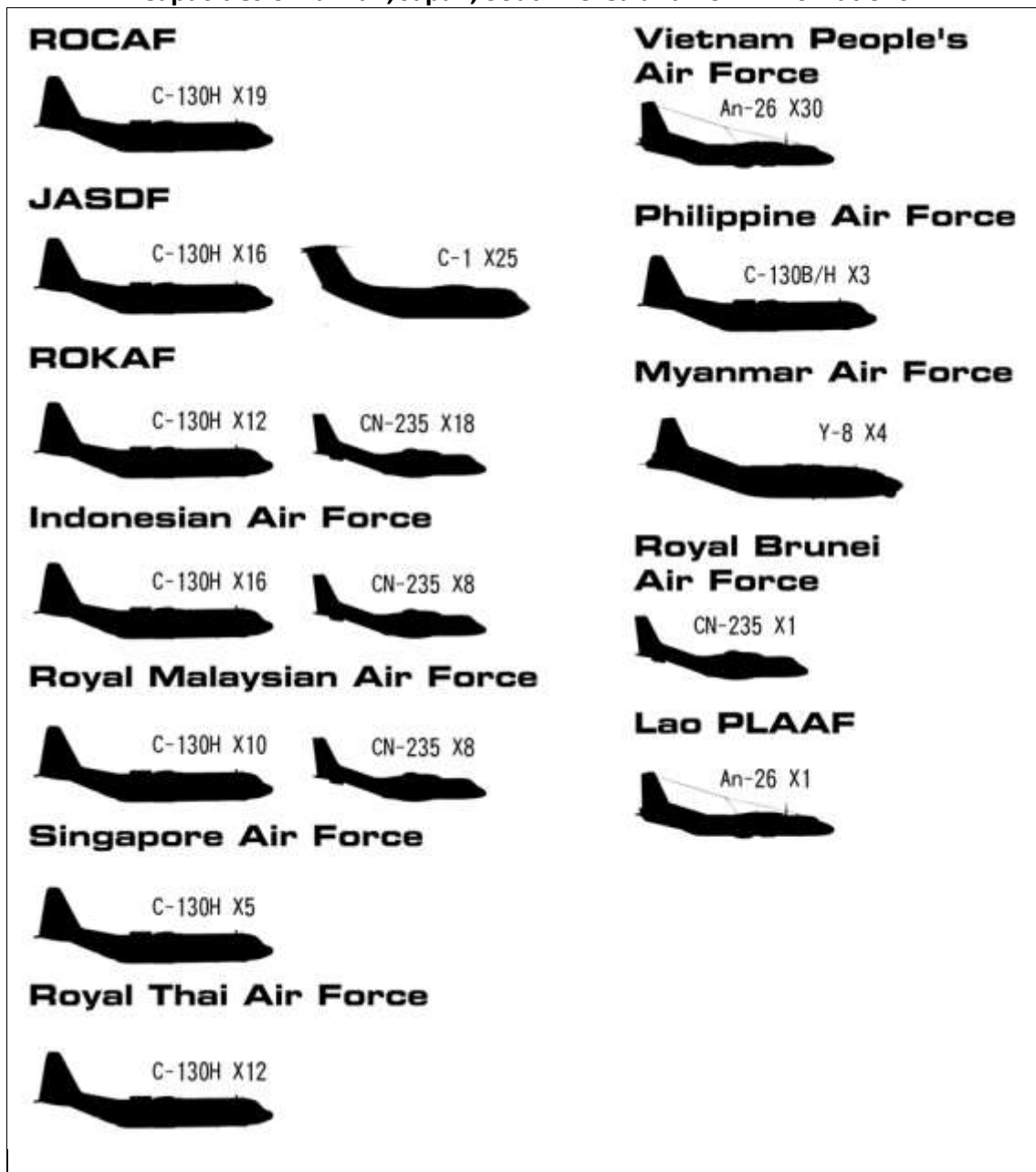
圖二 台日韓與東協十國空軍貨運能量比較圖



製作：蘇冠群

根據蘇冠群的比較，我國海軍的運量在東亞國家（不含中國）居第二位，僅次於印尼；空軍的運量在東亞國家（不含中國）也居第二位，僅次於日本（見表二與三）。海空運運量總和在東亞國家（不含中國）居第二位，僅次於印尼。

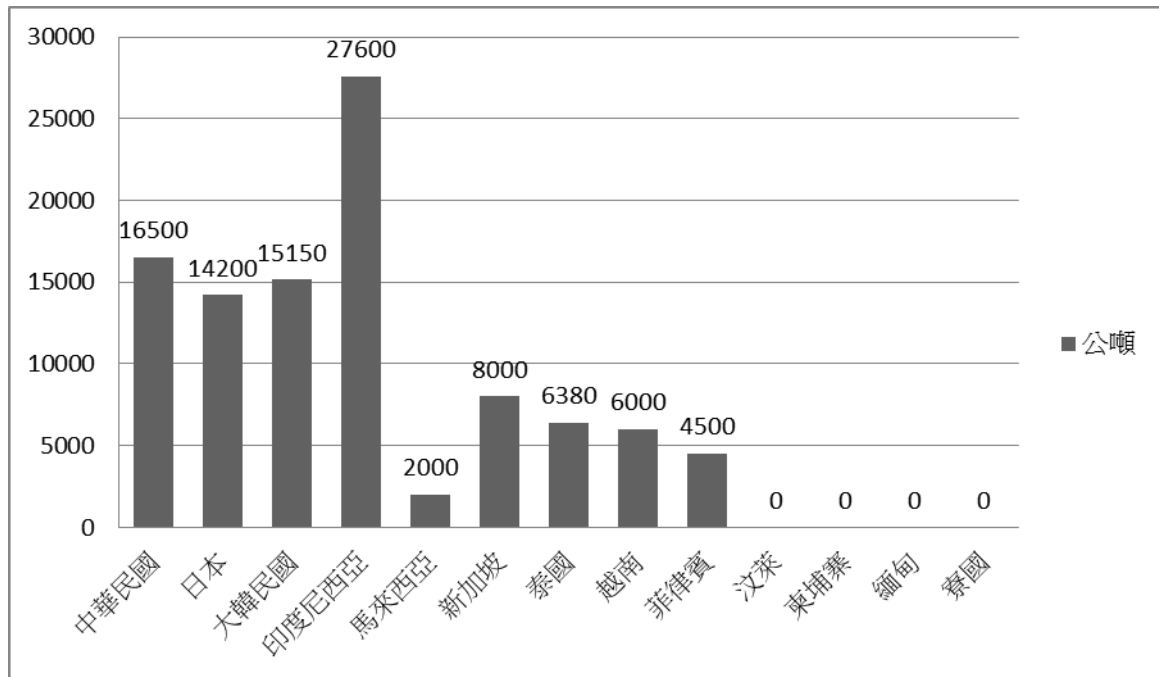
FIGURE 3 Comparison of Air Cargo Transportation Capacities of Taiwan, Japan, South Korea and ASEAN 10 Nations



Produced by Su Guan-chiun

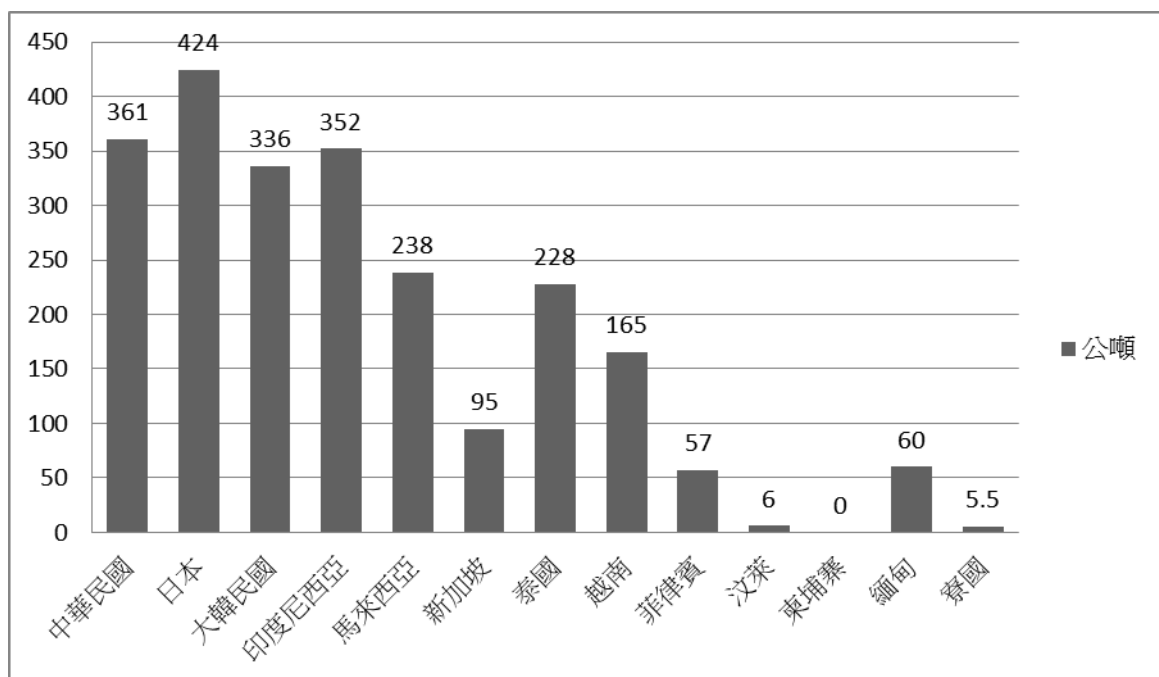
According to Su's comparison, our naval sealift capacity is the second large in the East Asia (excluded China) and only next to Indonesia; airlift capacity is also the second to Japan (see Table 2 and 3). Taiwan's combined air/sea-lift capacity is only second to Indonesia.

表二 海運總量比較

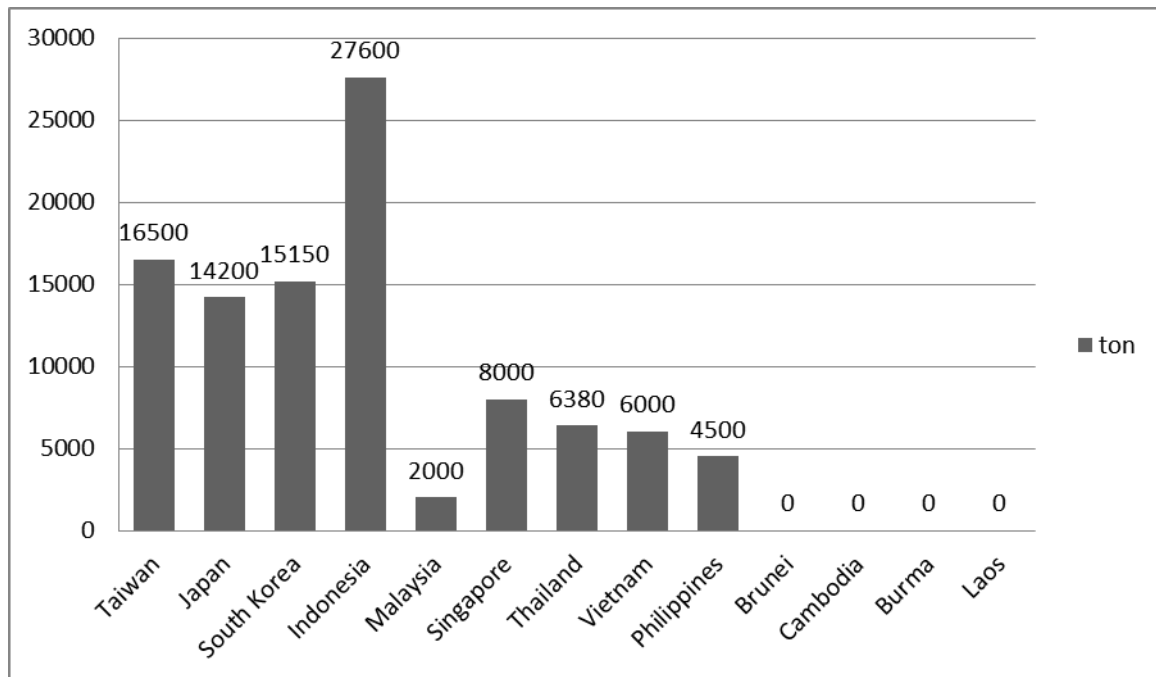


製作：蘇冠群

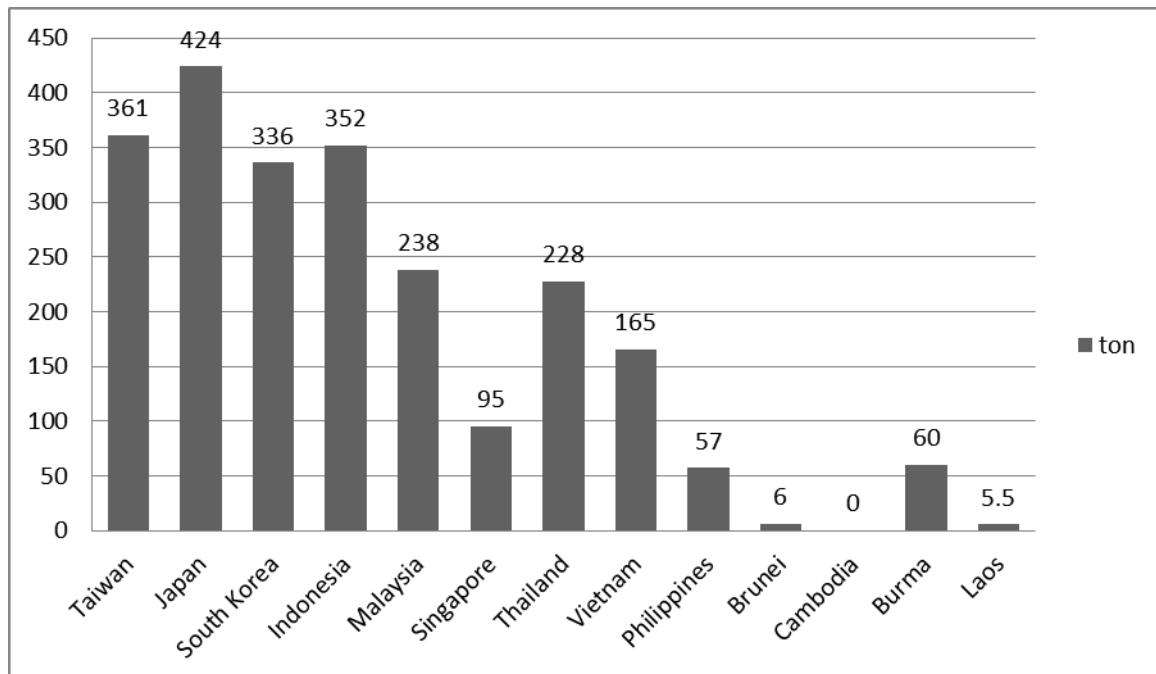
表三 空運總量比較



製作：蘇冠群

Table-2 Sealift Capacities

Produced by Su Guan-chiun

Table-3 Airlift Capacities

Produced by Su Guan-chiun

臺灣位於第一島鏈的中央，與菲律賓僅隔著約 250 公里寬的巴士海峽。在區域內執行海外人道救助與災害防救時，臺灣地理位置的優勢能讓大幅提昇此類任務的效能。回想 2004 年美軍執行南亞海嘯後的海外人道救助與災害防救任務時，許多受災區域急迫地需要淡水的供應，有效供應淡水是避免受害地區爆發瘧疾的關鍵，為了運送此一重要民生必需品，美軍得從關島或迪戈加西亞調派六艘美國軍艦來執行。如果臺灣在區域的海外人道救助與災害防救任務上發揮其能量並扮演更重要的角色，2004 年所遭遇的困難必然為大為降低。

執行海外人道救助與災害防救任務時，時間壓力是最大的挑戰，而任務效能的評估要看救援人員與物資是否能及時地前運到受災點，並有效率地降低民眾的損害，迅速地恢復當地基礎設施的主要功能。例如，2013 年的海燕颱風襲擊帛琉（十一月五日）與菲律賓（十一月八日），臺灣政府派遣 18 架次 C-130 運輸機運送 680 噸物資到菲律賓的宿霧機場，災後 17 天（十一月二十五日）海軍中和艦裝載 530 噸救援物資出航，3 天後抵達宿霧市。而在帛琉，災後 38 天（十二月十三日），中和艦再度出航執行另一次海外人道救助與災害防救任務，攜載臺灣民眾樂捐的物資遠赴帛琉災區，5 日後（十二月十八日）抵達帛琉並卸載物資，在十二月二十四日艦隊完成任務回到臺灣的母港。

臺灣海空軍可以更快更有效達成任務。臺灣雖有充足的能量與優秀的地理位置，如果缺乏制度化的協調與合作機制，一樣會導致救援遲延與物資浪費，從而影響海外人道救助與災害防救的任務效能。

國防部在 2010 年三月發布「國際人道救援前運作業要點」，雖然這個行政命令有越權之疑，但至少提供了國軍在海外人道救援與災害防救任務上的行動準則。在實務上，政治因素與國內法律缺乏明確授權，國軍海外人道救援與災害防救任務仍多數僅限於物資的運送。因此，儘管臺灣具有優越的地理位置與可觀的能量，可以在東南亞地區迅速執行海外人道救援與災害防救任務，但多數的軍事與非軍事部門仍未能充分認知到海外人道救援與災害防救任務的必要性，從而建立法律與組織上的基礎建設。

Taiwan is located at the center of the first island chain. A 250 kilometers-wide Bashi Strait separates Taiwan Island from the Philippines. Taiwan's geographical location carries profound implications for the effectiveness of FHA/FDR missions in the region. Looking back at the US-lead FHA/FDR mission after the South Asian Tsunami of 2004, many tsunami affected areas were in dire need of freshwater—access to an adequate supply of freshwater being critical for the prevention of malaria. Six US Navy vessels carrying the precious commodity had to be dispatched from Guam and Diego Garcia. If Taiwan's capacities could be maximized to play a more prominent role in regional FHA/FDR, difficulties such as those faced in the 2004 mission could be reduced.

Time pressure is the crucial challenge in the implementation of FHA/FDR missions. Mission effectiveness is measured by whether the required manpower and material for assistance are delivered to the desired point in time and efficiently to reduce the damage of population as well as swiftly restore vital infrastructure functions. For example, in case of Typhoon Haiyan that hit Taiwan's Micronesian ally Palau in 2013 (November 5) and the Philippines (November 8, four days later (November 12), Taiwan's government sent in squads of C-130 transport aircrafts for a total of 18 sorties carrying a total of 680 tons of supplies to Cebu airport in the Philippines. Seventeen days after the disaster (November 25), a Taiwan's Navy CHONG HO set sail carrying 530 tons of materials to the Philippines's Cebu City and arrived three days later (November 28). As for Palau, 38 days after the disaster (December 13) CHONG HO set sail again for another FDR mission carrying the rice, canned food and other supplies (including prefabs) donated by the Taiwanese people to the disaster area in Palau. Five days after leaving port (December 18), the naval squad arrived in Palau's Maraca Port and unloaded the supplies. On December 24 the mission was completed and ships arrived back their home base.

Our Navy and Air Force could operate faster and more effectively. Notwithstanding Taiwan's ample capabilities and advantageous geographic location, the lack of institutionalized coordination and cooperation mechanisms will still delay the arrival of assistance and lead to wasted material resources, reducing the overall effectiveness of the FHA/FDR mission.

For its part, the MND in March, 2010 released the "Directives of International Humanitarian Relief Forward Transportation" (IHRFT Directives in short), an executive director that, while possibly exceeding the scope of authorities (see below), at least provides Taiwan military some FHA/FDR related rules of engagement (ROE). In practice, due to international political reality and the lack of solid legal foundation, authorized military FHA/FDR missions are still confined mostly to the delivery of relief supplies. As things currently stand, even though Taiwan has considerable air/naval capacities and a privileged geographical location in the region from which it can provide rapid FHA/FDR operations, most of the military and non-military sectors do not yet fully recognize the significances of FHA/FDR and the need to establish the necessary legislative and institutional framework.

然而，「國際人道救援前運作業要點」畢竟只是行政命令，目前並沒有充分法律基礎授權國軍執行真正的海外人道救助與災害防救。「國防法」所授權的是國內的災害防救，而非海外人道救助與災害防救。因此，國軍對於「國際人道救援前運作業要點」的解讀採取謹慎的態度，在執行面上也自我限制在物資的運送，而這離真正的海外人道救助與災害防救任務還有段距離。針對此一法律授權不足，本黨立委姚文智委員已提出國防法相關的法律修正案（附件 5）。

當然不是所有的海外人道救助或災害防救任務都需要派遣軍方人員進入災區進行更為複雜的災後衝擊管理¹（在美軍的定義中，是海外災害防救重要的次任務之一）任務。但是，從海外人道救助與災害防救任務的整體效能觀之，即便任務僅限定為救災物資的運送，如果只把物資運送到當地國的港口卸載然後就離開，也是為德不卒。物資可能會無法及時送進災區，可能會擺在碼頭腐爛，也可能會遇劫。為避免這些無法預期的結果，我國政府應當從任務整體來思考，而非只是藉由物資運送而博得虛名。至少，政府必須思考如何進一步藉由內陸運輸將救濟物資真正地送到災民的手中。在菲律賓的案例中，許多先前抵達的國內非政府組織志工出來協助內陸的物資運送。「國際人道救援前運作業要點」第 5-3 條許可非政府組織志工搭乘軍機、軍艦以協助執行海外人道救助與災害防救任務，但作業要點中並沒有進一步地說明：這些非政府組織的志工的工作要如何協調以及他們的人身安全要如何保護。林偉聯牧師，臺灣基督教長老教會總會教會與社會委員會幹事，具有海外人道救助與災害防救豐富經驗，在國防小組的會議中，告訴我們：國內非政府組織間在此類任務的協調整合並非易事，而志工們的人身安全風險確實存在。為執行海外人道救助與災害防救任務，跨部會與軍文間的協調整合實有必要。但遺憾的是，國防部的「國際人道救援前運作業要點」無法號令其他部會，而許多國防部外的部會，卻連類似「國際人道救援前運作業要點」的行政命令都沒有。

¹ 美軍定義災後衝擊管理（Foreign consequence management）為：「美國政府協助盟邦或友邦的行動，用以因應在外國領土因人為或意外發生的核生化事件所導致的衝擊，以儘量拯救性命。」見：Department of Defense Dictionary of Military and Associated Terms, 2014, p. 100.

Nevertheless, as the IHRFT Directives is only an executive directive, there is still no sufficient legal basis for authorizing the military to perform genuine FHA/FDR missions. The National Defense Act authorize domestic DR, not FHA/FDR. Understandably, the armed forces must interpret the IHRFT Directives cautiously and exercise restraint in implementing them. Taiwan's military thus currently confines its FHA/FDR operation to supply transportation, which of course falls short of genuine FHA/FDR activities. In this regard, DPP legislator Yao Wen-chih has already proposed amendments to the National Defense Acts and other related laws for the purpose of bridging the legal gap in authorizing our armed forces to implement FHA/FDR missions. (see Addendum 5)

Of course, not all FHA/FDR missions require sending military personnel into a given affected area or getting involved in a more complicated Foreign Consequence Management mission (an important sub-mission in the U.S. defined FHA operation)¹. Moreover, in terms of the overall effectiveness of FHA/FDR operation, even a mission limited to the delivery of supplies would not be fully completed if the assignment is confined to shipping and unloading supplies to the host nation port. There is the risk that the goods may not reach the disaster-impacted populations in time or that the material will stay on the docks to rot, or get be looted. In order to avoid these unintended consequences, Taiwan's government should be thinking through the mission as a whole, rather than just a symbolic initiative aimed at boosting its international image by simply delivering supplies. The government must contemplate steps to ensure that its aid supplies are actually handed to the disaster victims by taking into account efficient inland transportation and distribution. In the case of the Philippines, many local Taiwanese NGO volunteers arrived beforehand to assist in the inland transportation and distribution of the supplies. In Article 5-3 of the IHRFT Directives, NGO volunteers are permitted to board military planes or vessels in order to assist with implementation of FHA/FDR mission, but there are no relevant provisions for the MND to follow regarding the coordination of the work of these NGO volunteers, their personal protection and so on. Rev. William Lim, Program Secretary of Church and Society Committee of the Presbyterian Church in Taiwan, who has had outstanding experiences in FHA/FDR, attends the meeting held by the Defense Committee and related that it will not be easy to integrate various local NGOs, while risks to the volunteers' personal security did exist in some cases. The need for close inter-agency and civil-military cooperation for the sake of carrying out FHA/FDR operations is evident. Regrettably, it would be problematic to apply the MND IHRFT Directives to the operations and related activities of MOFA and other ministries and departments, whereas these other agencies may not even have any similar FHA/FDR directives of their own

¹ Foreign consequence management is defined as "the United States Government activity that assists friends and allies in responding to the effects from an intentional or accidental chemical, biological, radiological, or nuclear incident on foreign territory in order to maximize preservation of life." See *Department of Defense Dictionary of Military and Associated Terms*, 2014, p. 100.

將充足的能量與優越的地理條件兌現可恃的海外人道救援與災害防救任務能力以達成所欲的目標仍需要很大的努力。權衡我們的資源與任務的需要，國防小組建議：提高國軍、海巡署與其他相關部會演訓的頻密度、海空運運載能量與任務持久性外，將建置一支由後備兵力與民間人員（結合非政府組織志工、新住民與外籍生）組成之志願團隊，以迅速並在充分的人身保護下進入受災區域執行任務。為增進效能，我國將尋求與外國進行雙邊或多邊相關聯合演訓之機會。同時，建造一艘 1 萬噸級醫療艦，在平時或危機時均可提供國內離島居民與國外民眾醫療協助。海外人道救援與災害防救的物資與裝備可儲存在太平島上，將該島建設成為此類任務的前置基地。

全球與區域的天災頻率急遽增加，常令人措手不及並帶來嚴重的傷亡。許多災害超乎個別國家能量——即便像高度發展的日本——所能夠獨自克服的。海外人道救援與災害防救任務的目的在拯救人命，區域的和諧與穩定是此類任務合作時的自然結果。單單這個理由，國家就沒有理由不去投入關注與資源在海外人道救援與災害防救。更何況，別的國家幫助過我們，飲水思源本是臺灣人的善良本性。追求普世人道價值，讓我們與周邊的國家距離縮短，讓和平發生。■

It needs enormous efforts to cash our sufficient capacities and excellent location into credible FHA/FDR capabilities to achieve our desired goal. Considering our resource and mission requirements, the Defense Committee proposes: to elevate significantly the FHA/FDR related capabilities and sophistication of our armed forces, Coast Guard Administration and other related agencies. The frequency of FHA/FDR related training and exercise should be intensified, the delivery capacities of our airlift and sealift could be increased, and operational sustainability needs to be lengthened. Furthermore, a volunteer task force, made up of Reserve and civilian (mixture of NGO personnel, new residents, or foreign students) components in combination with proper personal security protections, will be tasked with and quipped for rapid entry into affected areas to fulfill FHA/FDR missions. To improve our FHA/FDR effectiveness, Taiwan will seek out possible participation in bi- or multi-lateral training and exercises. For the same purpose, we can construct a 10,000ton hospital ship to provide constant medical assistance to our off-shore islanders and foreign population in peacetime and crisis response. FHA/FDR related supplies and equipment can be stored on Taiping (Itu Aba) Island and transformed this island as the forward base for such missions.

The frequency of natural disasters has increased globally and regionally. These disasters come out of blue and inflict considerable casualties of the population. Some disasters are so catastrophic that far beyond the capacity of any individual nation, even highly developed country as Japan. The very purpose of FHA/FDR is simple: saving lives. The regional harmony and stability is the natural products of FHA/FDR cooperation. For this reason alone, nations find no excuses not to commit their attentions and resources on FHA/FDR. Besides, Taiwan received assistance from other nations; it is exactly Taiwanese nature of goodness to assist other nations in return. The pursuit of common humanitarian value closes the distance between Taiwan and other regional nations and makes peace happen. ■

附件
ADDENDUM

附件 1

國軍部隊參與災害防救工作之地方政府觀點

劉建忻

台灣災害發生頻仍，從中央各部會到縣市政府，都把災害防救工作視為最嚴峻的考驗。自 921 大地震以來，國軍在防救災工作上的角色日益吃重，2009 年「莫拉克」颱風重創台灣中南部地區後，更因政府救災體系的反應速度與效能受到嚴重批評，讓行政院檢討修正「災害防救法」，來強化國軍部隊主動協助災害防救機制，賦予國軍部隊當發生重大災害時，更迅速有效的投入救災任務的責任。此後各地部隊更成為政府防救災團隊當中不可或缺的要角，其功能也被賦予更高的期待。

除了修法強化職責，國軍與地方政府更需良好的默契與戰力整合，才能讓防救災機制運作順暢。為此，雙方平時就必須透過地方首長主持、每年召開 2 次的「三合一會報」（災害防救會報、全民動員會報、全民綜合戰力協調會報），來強化國軍部隊執行災害防救任務與效能，並提升統合機制的效能；另外國軍也會支援地方政府辦理災害防救兵棋推演及實兵演練，以鍛練彼此的協調配合能力。

依現況，國軍各地的指揮中心在災害發生時，會配合地方政府應變中心開設隨時派員進駐，啟動應變機制並預置兵力，以配合防災需求。至於國軍的救災任務範圍，根據國防部「國軍協助災害防就派駐聯絡官執行要點」，內容可說相當廣泛，包括鄉民安置、人員疏散、維生物資輸送、公共環境清理復原、道路橋樑搶通、消毒防疫執行、校園清理、協助河道疏濬、輔助警察單位進行秩序維護、巨石爆破等。

這些工作其實與地方政府的職掌有重疊之處，但由於災害來臨前後的應變需求可能數倍於平時所需，地方政府卻普遍有人力、物力不足的問題，因此國軍具有機動性與服從性的充足人力資源，遂成為有力幫手。

由於地方政府相當重視國軍的防救災力量，協力機制的運作皆堪稱順暢；國軍在歷次執行災害緊急應變及災後復原重建工作時，也都獲得普遍好評。然而隨著極端氣候有增無減，國軍部隊投入救災也已成常態性任務，展望未來，仍有力求精進的空間。

首先，是國軍的作息時間是否可有更大彈性，縮短兵力整備時間，以配合市民需求的問題。國軍救災以兵力支援為主，執行裝填砂包、預防性疏散撤離、農作物搶收、災後家園恢復整理、環境垃圾清淤等工作；但由於部隊作息時間嚴謹而固定，未必能完全配合災民的急迫需求，加上兵力核派的內部作業仍需走完程序，以及地區內各單位、軍種間的協調，有時候兵力抵達的速度會與市民需求產生落差，使預期效果打折。

但站在部隊的角度，人力供給並非可以無窮無盡，畢竟部隊有其本業的訓練、勤務等工作，弟兄也不是機器人，年輕義務役士兵的安全與工作壓力更需妥為安排。這一點，地方政府與部隊之間必須要相互體諒，尋求平衡點。

因此地方政府在申請兵力支援時，應該依經驗判斷盡早提出，讓部隊有充裕時間調度安排；區公所也可安排災時國軍的適當休息場所，使部隊可就地紮營，能夠即時迅速動員，提升救災速度及效率。而國軍方面，面對重大災難時，可以更主動預作投入準備，不待命令申請，主動聯繫地方政府需求或縮短申請時程。如此雙方皆調整態度與作業模式，將可建立更好的分工模式與聯繫管道，才能讓支援與需求無縫接軌。

其次是國軍工程機具的支援問題。現階段國軍部隊支援救災大都以人力資源及中型戰術輪車為主，相關工程機具因戰備需要，無法及時動員支援，調派重型工程機具至災難現場協助的個案少之又少，地方政府在有需求時，只能仰賴以與廠商的開口契約進行必要之緊急處置作業。

因此國軍投入災害防救任務應依照實務需求，投入相關兵力及機具，不應限縮於僅是兵力支援；在緊急特殊情況下，可以主動調派工程機具協助，如道路搶通、淤泥清淤、大規模之漂流木處理等。透過工程機具的投入，救災成效將可事半功倍，國軍在災時的戰力亦可發揮到極致。

綜言之，台灣地區每年都會遭受颱風豪雨侵襲，天然災害規模難以預測掌握，有賴政府、人民、民間救難組織及國軍部隊攜手同心共同面對災害，方能將災害損失減至最低。而災害防救工作千頭萬緒，防救災工作不能由一個單位獨立完成，國軍部隊因為有高度的服從性

及明確指揮調度系統，在整體災害防救體制中扮演相當重的角色，更積極主動地投入救災工作，將會是全民之福。

（劉建忻是台南市市政府副秘書長）

附件 2

如何制度化 臺灣在東南亞區域執行災難救助與人道救援政策

林廷輝

一、東南亞地區災難救助與人道救援體制現況

由於氣候變遷與全球暖化之影響，人類生活面臨嚴重的挑戰，大規模天然災害，造成人民生命財產遭受嚴重損傷，東南亞區域在 2004 年因印度洋大地震引發的南亞大海嘯，造成印尼死傷者眾，接下來無論是洪水、颱風、地震等，也讓泰國、越南、緬甸、菲律賓等國飽受其害。此外，人禍部分，從 2014 年馬航 MH-370 空難事件中，更可看出馬來西亞單一國家救援機制的窘境。

面對此一挑戰，東協曾在 2005 年通過「東協災難管理與緊急回應協定」(ASEAN Agreement on Disaster Management and Emergency Response)，此後，東協推動了年度區域災難緊急應變模擬演習(ASEAN Regional Disaster Emergency Response Simulation Exercise, ARDEX)。從 2005 至 2008 年，分別由馬來西亞、柬埔寨、新加坡以及泰國主辦災難模擬演習，希望能從演習的過程中發展出一套標準作業程序(ASEAN Standard Operating Procedure for Regional Standby Arrangement Coordination of Joint Disaster Relief and Emergency Response Operations, SASOP)。

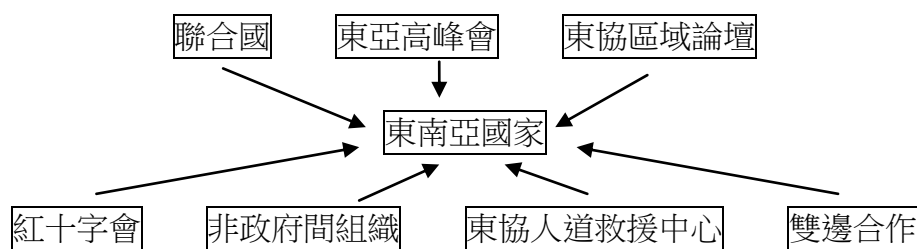
在東協災難管理最大挑戰便是區域內資源不足。2008 年 5 月，東協秘書處設立了「東協災難協助合作基金」，其目的在於協助緬甸人民的災後重建工作、購買救援物品、提供醫療援助等用途。基金主要來源並非由東協各國所支持，而是由東協組織、東協國內團體、對話夥伴、其他非政府組織等第三部門團體，以及個人提供捐款所共同彙集而成。

2010 年在新加坡舉行災難管理委員會的會議中，各國與會代表希望能落實兩項合作計畫：其一是建立「東協人道救援中心」(ASEAN Humanitarian Assistance Centre, AHA Centre)，其二是通過「東協災難管理暨緊急反應協定工作計畫」(AADMER Work Programme 2010-2015)。工作計畫四大戰略目標包括：(一) 風險評估、早期預

警與監控；(二) 及早準備與回應；(三) 預防災難與減災；(四) 災後重建與復原。為了落實此四大戰略目標，東協各國設定了六項工作重點，分別是：(一)「東協災難管理與緊急回應協定」的制度化；(二) 建立夥伴關係策略；(三) 促進資源的動員；(四) 向外延伸與擴展；(五) 訓練與知識管理；及(六) 資訊管理與溝通科技等。會中，日本重申將透過「日本—東協整合基金」(Japan-ASEAN Integration Fund, JAIF) 提供東協減災工作方面的協助，並著眼於四個工作計畫：(一) 在各級學校推動災難教育；(二) 強化地方政府官員在災難管理議題上的能力建構；(三) 運用衛星影像技術來強化災難管理；(四) 發展東協災難事件網路資料庫。

2013 年，於汶萊舉行的第 23 屆高峰會上，通過了「東協強化災難管理合作宣言」(ASEAN Declaration on Enhancing Cooperation in Disaster Management)，強調東協與東亞高峰會合作關係。

圖 1 東南亞國家災難管理外部因素



日本協助方式

日本主要以挹注基金資源，尤以日本基金會 (The Nippon Foundation) 的捐款所占比例最高 (占總基金的 34.5%)，來自東協對話夥伴的援助也占了 28.6%，而來自於東協內部的資源則僅占 17.8%。

美國協助經驗：借鏡海燕颱風災難救助¹

2014 年 4 月，美國與菲律賓簽署為期 10 年的「增強防務合作協

¹ Thomas Lum and Rhoda Margesson, *Typhoon Haiyan (Yolanda): U.S. and International Response to Philippines Disaster* (Washington D.C.: CRS, Feb. 10, 2014), pp.7-9, <http://fas.org/sgp/crs/row/R43309.pdf>.

議 (Enhanced Defense Cooperation Agreement, EDCA)，白宮國家安全亞洲事務資深主任麥艾文 (EVAN MEDEIROS) 表示：這是一個框架協議，其將允許美國和菲律賓在一系列任務上，比如人道主義援助，救災，海上安全部隊，打擊跨國犯罪，(防止) 大規模殺傷性武器的擴散等方面進行(聯合)訓練和演習。美國和盟友間確立了有關災難救援、海事安全、聯合力量方面的一整套共同利益。

美國在 2013 年執行菲律賓海燕颱風任務時，除國際社會包括聯合國與區域組織及非政府間組織予以協助外，美國政府相關部門作為，亦值得借鏡：

海燕襲菲後隔日，美國駐菲代辦 Brian L. Goldbeck 發布災難通報，美國國際開發署 (USAID) 透過「外國災難援助辦公室」(OFDA)，立即授權救災基金釋出並執行緊急反應計畫，國防部長海格命令美國太平洋司令部組成救援隊伍，2014 年 1 月底，美國政府已提供 8,700 萬美元人道援助，私部門則捐贈 5,900 萬美元。

1. 美國國際開發署：以「外國災難援助辦公室」指揮，組成災難援助反應小組 (DARTs)，評估人道需求、救援物資定位、與美國大使館、菲律賓政府及國際社會團體之間的協調工作。

2. 國務院：成立危機應變任務小組，監控災難的發展，協調其他單位，提供關切海燕颱風的美國人諮詢服務，駐馬尼拉大使館提供協調與通訊中心，負責與其他單位聯繫，聯繫對象包括美國其他部門、菲律賓政府、私人組織與國民等。

3. 國防部：立即從駐日本美軍抽調海、空軍及海軍陸戰隊共約 1000 名進駐災區，約有 90% 的救難物資由美軍卡車運送，美軍在此次救災中，共出動 13,400 人次，66 架航空器及 12 艘海軍船艦，救援 21,000 人，當中包括 500 名美國公民，同時與其他國家提供的軍事援助協調，包括澳大利亞、日本、北約、南韓及英國等，至於中國由於南海事務影響，僅派出一艘海軍醫療船，貢獻極少。

4. 國土安全部：依據「移民與國籍法」給予臨時保護身分 (TPS)，針對在美菲律賓人因颱風因素而暫時停留在美國數日的便利。

二、臺灣目前對外災難救助與人道救援體制

涉及對外災難救助與人道救援，臺灣則依 2010 年「國際合作發展法」第 7 條規定：「國際合作發展事務範圍如下：二、對遭受天然災難或戰亂之國家及人民，提供人道援助。」不過，臺灣對外災難救助與人道救援最大動能仍來自民間，倘以菲律賓海燕颱風案觀之，截至 2014 年 4 月，臺灣民間捐款金額約 449.26 萬美元，物資約 825.97 萬美元，政府提供的協助則動用國防部海、空軍，協助將物資載往菲律賓，第一波已派遣空軍 18 架次 C-130 運輸機，載運 150 公噸物資前赴災區，第二波再以海軍中和艦載運 530 公噸物資，外交部同時也協助國內民間團體如路竹會前往災區協助。換言之，國防部門救難物資運送成為臺灣政府主要的任務，至於其他未透過政府機構的民間單位，包括中華民國紅十字總會、佛光山、慈濟、台菲友好協會等。

因此，我國國合會主要負責對外災難救助與人道救援計畫，該會下屬機構人道救援處為業務職掌單位，然倘遇大型災難，需透過更高階層協調對外援助計畫，則由外交部主導，協調國防部等其他單位，而國防部在 2010 年 3 月 26 日亦發布「國際人道救援前運作業要點」不過其任務仍停留在救災物資的運送，對於國軍前往災害現場搜救任務，礙於政治因素考量，仍未有具體行動；此外，對於援外糧食計畫，則依「糧食人道援外作業要點」予以申請運送。

三、政策建議

(一) 東南亞國家內部跨國救援機制，主要以東協機制為主，在社會文化共同體架構下，面臨災難救助與人道救援機制，主要透過「東協人道救援中心協調」，因此，倘我國欲與東協機制進行合作，該中心相關計畫可優先考量。「東協災難管理暨緊急反應協定工作計畫」的六項工作重點，則是可切入的具體項目。

(二) 東協雖已存在多邊救援機制，但由於資金及技術設備問題，無法發揮最大功效，在每一次天災人禍中，相關受難國均需藉由區域外的力量以補足救災實力，除了各國搜救隊伍外，美國派遣的海軍陸戰隊及相關軍事人員，在任何救災場合上也發揮了重要的功效，由於軍隊在現代社會中扮演的角色已擴展到應對非傳統安全威脅，但我國國軍要進行海外救災，除了有政治考量外，法律授權特別重要，有關國軍支援海外救災任務，除既有運輸方面的安排外，人員（需設定何種人員，非戰鬥軍種，如軍醫，或具有特殊技能化學兵等）的立法安排則顯得相當重要，同時建立訓練機制，平時以國內為演練，倘東南亞國家發生任何災難，亦可即時抵達救災。

(三) 針對東南亞國家，可能因其迫於中國壓力，未能公開應允台灣派遣救災部隊，不過，東南亞國家亦不可能讓人民解放軍入境救災，除可思考與東南亞國家簽署相關人道救援協定外，倘與美軍之間達成某種協作計畫，一方面可較有彈性地處理救災案，另一方面可與美軍協作，達到非軍事演訓，但有軍事聯合演訓之效，甚至於此之前，亦可與美國簽署人道救援協定，美國亦可提供相關代訓等，提升國軍救災與演訓能力。

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附件 3

國軍執行海外人道救援與災難救濟的能量評估

翟文中

2013 年 11 月，我國在南太平洋邦交國帛琉遭到強烈颱風海燕侵襲，這起天災在該國造成了嚴重災情。為了提供友邦支援，海軍納編了「中和號」(LST-232)與「昆明號」(PFG-1205)兩艦前往該國執行賑災工作。12 月 13 日，這支編隊由左營港啟航，載運著全國各界捐贈的米糧、罐頭與組合屋等物資前往災區執行人道救援與災難救濟 (humanitarian assistant/disaster relief) 任務。12 月 18 日，支隊抵達帛琉馬拉卡港 (Malakal Harbor) 卸載物資，12 月 24 日兩艦完成任務返回左營基地。其後，海燕颱風亦重創了菲律賓的中部地區，我國政府隨即伸出援手執行人道救援任務，在出動 C-130 運輸機 18 架次運送緊急物資後，旋即派出「中和艦」運載了 530 噸物資至菲國宿霧市 (Cebu) 賑災，這是我國海軍軍艦近 10 多年來首次靠泊菲國港口，上次則是 2003 年 11 月敦睦艦隊訪問菲國蘇比克灣。

2014 年 3 月，馬來西亞航空 MH370 班機失聯之後，政府立即派出成功級飛彈巡防艦「田單號」(PFG-1110)與空軍 C130 運輸機前往遠在 1,000 哩外的南海水域參與國際救援任務。在此同時，國防部亦通令海空軍完成戰備整備，並下達指示要求在南海水域周邊執行任務的機艦加強對海面的搜索，必要時得加入多國海軍進行中的聯合搜救行動。事實上，國軍執行的人道救援與災難救濟任務絕不僅止於前揭三個案例，國軍機艦經年在台灣海域及周邊水域對本國與外國遇難人員提供必要協助。2013 年 11 月，一艘航經我國東部海域的巴拿馬籍鑽油平台船，其上一名美籍船員身體突然發生不適，國軍獲報後立即派遣 S-70C 直升機前往支援，並將該名生病船員後送就醫，這類例子可說不勝枚舉。由於台灣周邊海空域係國際海運與空運的輻輳之地，加上秋冬之際氣象條件惡劣，三不五時即有船舶或航空器在此水域遇難，我國海空軍部隊執行此等人員搜尋與救難任務早已累積了豐富的經驗。

冷戰結束後戰略環境發生了重大轉變，國家間的關係已由過去的「衝突對抗」轉變為「合作發展」。在這種情況下，各國武裝部隊逐漸開始執行更多的「非傳統安全」或「戰爭外行動」(Operations Other

Than War) 任務。當中廣為人知的例子包括了南亞海嘯後日本海上自衛隊派出艦艇至災區執行救難任務；美國海軍第七艦隊派出機艦協助日本 311 震後災區搜救；中國派出海軍艦艇至亞丁灣執行打擊海盜任務以及今年年初多國派出機艦搜尋馬航失事班機等等。或許最重要的，亞太諸國位於環太平洋地震帶上，存在著地震、海嘯、颱風、土石流與火山爆發等各種不同型式天災，任何國家遭受前揭災害襲擊時，都需要國際社會的奧援方能安置災民與進行災區重建。在可預見未來，國軍會有更多的機會參與海外人道救援與災難救濟任務，透過這些行動參與，除可展現國家的軟實力外，同時亦可彌補傳統外交手段的不足，用以增進國家的聲譽並與接受援助國家發展良好的合作互動。

雖然，國軍在過去擁有執行人道救援與災難救濟的豐富經驗，然而執行相關任務的地域多在台灣周邊海空域，在後勤補給與計畫作為上不似支援他國般的錯綜複雜。當然，國軍要能有效執行海外人道救援與災難救濟任務必須在下列領域進行提升，相關策進作為茲述如下：

■提升艦至岸的機動能力：由於天災襲擊地區經常對外連絡中斷，必須運用直升機或兩棲突擊車等特殊載具，方能克服險惡地形進入災區執行任務。因此，擁有大型甲板可攜行直升機的艦船為執行此等任務的最佳載台。倘若國軍僅單純提供賑災物資，運用商船或運輸艦即可達此目的。

■人道救援與災難救濟屬戰爭外行動，其內涵與執行與軍隊傳統的戰備訓練差異頗大，加上海上救災出動的機艦有時必須進入受援國的領土、領海甚至內水，強化執行團隊的國際法與國際海洋法知識有其必要，這有助人道救援與災難救濟工作的開展，亦可降低與受援國間互動產生的不必要磨擦。

■國軍未來執行海外人道救援與災難救濟任務，工作內容應以運送賑災物資為主，醫療救助與組合屋安裝為輔。空軍的 C-130 運輸機雖可快速地將人員與物資送至災區，但是酬載量相當地有限，運用上亦不符經濟效益。因此，海軍是執行此項任務無可替代的載台，政府應提升艦艇執行人道救援與災難救濟的能力，例如在艦艇設立較完備的醫療設施等等。

■就當前實踐言，人道救援與災難救濟任務的遂行具有多國參與

性質，因此國軍應爭取與區域內的其他國家進行相關任務演練，這些演習包括了環太平洋（RIM PACIFIC）、金眼鏡蛇（Golden Cobra）與巴厘卡坦（Balikatan）等等。即令受限政治現實無法派兵參與，但可爭取以觀察員身份與會，瞭解多國聯合執行人道救援與災難救濟任務的細節、規劃以及執行。

（翟文中是海軍備役上校）

附件 4

A Roadmap for Taiwan's Overseas Humanitarian Assistance and Disaster Relief (HA/DR) Missions

Joanna Yu Taylor

Taiwan has had many successful overseas HA/DR missions despite a lack of diplomatic relations with the recipients of their assistance. For the 2011 triple earthquake/tsunami/nuclear disaster that hit Fukushima in Japan, Taiwan was not only the largest financial aid donor other than the United States, but it also contributed civilian and government-organized rescue teams to the affected areas. In addition, Taiwan assisted in the evacuation of Japanese citizens and foreign nationals to Taiwan, including Americans and Europeans. The Japanese government was so grateful for the substance and scope of Taiwan's assistance that diplomatic courtesies were given when thanking Taiwan – the Taiwanese delegation was seated in the diplomatic corps section at the official thank you ceremony. Similarly, after Typhoon Haiyan ravaged the Philippines in 2013, Taiwan was the first to arrive at the scene – its military cargo planes provided loads of emergency and relief supplies. Taiwan was also one of the top five financial aid donors. The swiftness and size of the Taiwanese assistance efforts were widely reported and praised by the Asian press. In addition, a grateful Philippine government, just like the Japanese government, afforded Taiwan diplomatic courtesies when acknowledging Taiwanese aid – in providing updates on the relief effort, the Philippine government's Department of Foreign Affairs spokesman noted: "22 countries, plus the European Union and Taiwan," have offered humanitarian assistance and disaster relief to the Philippines.

At the same time, Taiwan has also suffered a few setbacks in its international HA/DR engagements. As far back as the 2009 Indonesian earthquake and as recent as the 2014 Malaysian Airlines Flight 17 incident, Taiwan's role was limited due to the host government's concern of Chinese sensitivities.

HA/DR is a non-traditional security issue, which is conceptualized as

an area of military diplomacy that transcends national interests and thereby allows countries to discover new areas of cooperation. In Taiwan's case, that means the possibility for other nations to look beyond their One-China policy and partner with Taiwan on HA/DR either bilaterally or multilaterally. However, in reality, geopolitical considerations can still get in the way, and we see a pattern emerge. In instances where Taiwan's overtures are not blocked by China, Taiwan is able to be a major contributor to international HA/DR efforts. However, in instances where China pressures the host government, Taiwan can only play a limited role, with little operational involvement, and is confined primarily to providing financial aid. Despite this, HA/DR still affords Taiwan more opportunity for greater international involvement than traditional security issues, where mutual recognition of sovereignty is required in order to conduct business. It is still not an easy task: Taiwan needs to make lemonade out of lemons.

NORMS REGIME AND OPERATIONAL INFRASTRUCTURE

Taiwan does not always have to be in the position of asking permission to be involved. It has a few chips to play of its own. Taiwan might not be a member of many international organizations, but it is a member of an important few, including Asia-Pacific Economic Cooperation (APEC), the Asian Development Bank (ADB), and the International Committee of the Red Cross. It is a little publicized fact that at APEC, Taiwan is the co-chair of the Emergency Preparedness Working Group (EPWG). Originally created by APEC Senior Officials in 2005 as a Virtual Task Force for Emergency Preparedness (TFEP), in 2010, it was upgraded to a Working Group and rechristened the Emergency Preparedness Working Group (EPWG). EPWG's mandate is twofold: (1) to build capacity in the region so that APEC member economies can better mitigate, prepare for, respond to and recover from emergencies and natural disasters; and (2) to improve coordination and enhance intra-APEC cooperation and integration of best practice emergency and natural disaster preparedness efforts in APEC.

Co-chairmanship is rotational among working group members, and Taiwan should take advantage of its current co-chairmanship to take a leadership role and insert Taiwan into the multilateral conversation on

HA/DR that is currently taking place. For instance, it should advocate for the establishment of an EPWG After-Action Conference Series to dissect lessons learned in the aftermath of international assistance to disaster areas. The EPWG After-Action Conference ought to include the establishment of protocols for responding to future disasters as a key agenda item. Other regional and international organizations such as ASEAN and UN are already developing these protocols; Taiwan should seek to join and shape the conversation through APEC.

Taiwan should also use the APEC vehicle to insert itself into the emerging regional HA/DR operational infrastructure. For instance, Singapore has established a Maritime Command and Control (C2) Centre at its Changi Naval Base. The C2 Centre houses a Maritime Security Centre, an Informational Fusion Centre, and a Multinational Operations and Exercise Center. The C2 Centre serves as a platform to foster inter-operability and information exchange for the conduct of maritime security and HA/DR. It includes in its staff Singaporean military officers as well as International Liaison Officers from various participating nations. Given its close military working relationship with Singapore, Taiwan should explore ways to be integrated into this regional HA/DR command and control hub.

Furthermore, Taiwan should use the argument of precedence to become more involved in international organizations discussing HA/DR and to be integrated into the operational infrastructure that facilitates international assistance. Taiwan traveled to and participated in the HA/DR efforts in Iran in 2003, Indonesia in 2006, China in 2008, Haiti in 2010, New Zealand and Japan in 2011, and the Philippines in 2013, just to name a few instances. It should make the argument that given that it is already part of the action, it should be made an official part of the coordinated international actions and discussions.

TRAINING AND EXERCISES

Another little publicized fact is that Taiwan has a state-of-the-art HA/DR training facility in Taichung. The National Fire Agency Training Center (NFA Training Center) was built in 2010 in order to better train for and respond to Taiwan's natural disasters. The NFA Training Center is located in Zhushan, Nantou County, and is a sprawling 2.7 square mile

campus that offers forensic labs, multimedia classrooms, and live simulated trainings. It has a total number of 13 training sites to practice 66 kinds of rescue scenarios, including collapsed and fallen buildings, indoor and outdoor fire, chemical and oil spills, landslides and mudslides, and surface, underwater, and swift water accidents. It reproduces a multitude of rescue environments, such as a marine vessel, an aircraft, a rail-car, a bus stop, a subway station, a highway, a long tunnel, and both tall and low buildings. It also has an artificial river channel capable of simulating swift currents and short drops. The center also has Search and Rescue dogs for the trainees to work with. The Center is able to train up to 700+ people at one time, and is one of the three largest training facilities in the world. It has top notch instructors, who are certified by the International Rescue Instructors Authority (IRIA).

Since its inception, the NFA Training Center has trained foreign professional rescue groups as well as foreign government emergency response teams, including components of the Hawaiian National Guard. With this state of the art facility and Taiwan's wealth of knowledge and experience in disaster relief, Taiwan should seek a higher international profile as the go-to country for disaster relief knowledge and training. There should be a major push to publicize the NFA Training Center and establish it as an international HA/DR Center of Excellence. In addition, Taiwan should offer training to other Asian countries, such as the Philippines and Indonesia, whom Taiwan has assisted in the past. This can be done as a stand-alone outreach activity, or as part of a broader formal dialogue on building a bilateral HA/DR response architecture. Instead of establishing ad hoc arrangements every time a crisis strikes due to a lack of formal diplomatic ties, Taiwan should pursue the establishment of standard operating procedures or sign Memorandums of Understanding (MOUs) on the flow of Taiwanese aid and personnel during crisis periods, so that Taiwan can stabilize its HA/DR relations with regional governments and respond even more swiftly to future crises..

If Taiwan is contributing to the operational readiness of nations to response to natural disasters, it should seek reciprocation in return. As such, Taiwan should seek participant or observer status in multilateral exercises geared towards HA/DR readiness and response. For instance, Taiwan should partake in the USPACFLT-led Pacific Partnership Exercise,

which focuses on HA/DR interoperability, and the USPACOM-led Pacific Endeavor Exercise, which focuses on HA/DR communication. In addition to being focused on HA/DR, these two exercises also have the distinction of being China-free events. Furthermore, in addition to the various national players, these exercises also host NGOs and subject matter experts. Therefore, if there are sensitivities that would preclude Taiwan participating as a national team, then Taiwanese HA/DR NGOs (neatly catalogued in a MOFA report titled “Humanitarian Aid and Charity”) and experts and instructors could step in. Taiwan could also seek participation with the US at the state and local level. For example, Hawaii holds an annual HA/DR exercise called Mahani Pahili, and the Hawaiian National Guard already has a relationship with Taiwan’s HA/DR infrastructure. Furthermore, many Asian countries hold annual exercises, including Japan, the Philippines, and Singapore. Taiwan should inquire into opportunities for involvement whenever their exercises focus on HA/DR.

CONCLUSION

Taiwan’s overseas humanitarian assistance must achieve both political and diplomatic ends. It must strengthen bilateral and regional ties, showcase Taiwan’s sophisticated economy, and publicize Taiwan’s maturity as a responsible stakeholder. It needs to be integrated into the emerging norms regime and operational picture on HA/DR. It can do so through its existing membership in international organizations; it can also argue for official inclusion, since countries and organizations have already worked with Taiwan in an ad hoc fashion during previous natural disasters. The impressiveness of the NFA Training Center cannot be over-emphasized. Its state of the art facilities should be an attraction for national governments, and if Taiwan is able to leverage those relationships wisely, it could become more deeply involved in reciprocal training and exercises.

Taiwan is increasingly being marginalized in the international community due to the preponderance of China’s influence on international affairs. HA/DR is an avenue where Taiwan can carve out some international space. However, if China turns its focus onto HA/DR, it could easily block Taiwan’s participation, just as it had in many other realms of international activity. Therefore, Taiwan must leverage its wealth and ex-

promote judiciously to ensure it garners the greatest benefit for Taiwan's international profile and reputation, and build up its network quickly before China makes it a policy to block Taiwan's foray into international HA/DR efforts.

(Joanna Yu Taylor, Adjunct Senior International Policy Analyst, RAND Corporation)

附件 5

立法院第 8 屆第 6 會期第 7 次會議議案關係文書

立法院議案關係文書 (中華民國 41 年 9 月起編號)
中華民國 103 年 10 月 22 日印發

院總第 850 號 委員提案第 17148 號

案由：本院委員姚文智、葉津鈴、鄭麗君等 19 人，鑒於現行國防法對國軍執行海外災害防救任務之授權不足，為善盡國際社會成員之責任，實踐人道救援之普世價值，完善協助友邦災害防救，提出國防法第十四條條文修正草案。是否有當？請公決。

說明：

- 一、2009 年 8 月的莫拉克風災在台灣留下重大的傷害，促使國人正視國軍在國內災害防救的角色，經本院於 2010 年通過「國防法」第十四條修正案，於條文中軍務作戰指揮事項增列「災害防救之執行」，使國軍執行國內災害防救任務有明確之法律授權，得以在此授權下進行相關計畫之策定與裝備之購置。
- 二、為善盡國際社會一員之責任，近年來國防部屢屢支援外交部海外救災任務（依 2010 年立法之「國際合作發展法」第七條：「國際合作發展事務範圍如下：二、對遭受天然災難或戰亂之國家及人民，提供人道援助。」），擔任物資的運送與醫療的提供。2013 年 11 月海燕颱風後對菲律賓的人道救援任務為例，政府動用國軍海、空軍，協助將物資載往菲律賓，第一波派遣空軍 18 架次 C-130 運輸機，載運 150 公噸物資前赴災區，第二波再以海軍中和艦載運 530 公噸物資。2014 年 1 月，國軍醫療團隊甚至遠赴海地，協助友邦進行震災後的搶救任務。
- 三、為執行前揭任務，國防部雖於 2010 年 3 月 26 日發布「國際人道救援前運作業要點」，但此一要點僅為行政規定，缺乏足夠的法律授權，為完善國軍執行海外災害防救任務，宜於「國防法」中增列對動用國軍執行海外災害防救任務之法律授權，特擬修正「國防法」第十四條增修案補實之。

提案人：姚文智 葉津鈴 鄭麗君
連署人：李俊邑 邱志偉 李桐豪 林岱樺 管碧玲
田秋蕾 陳其邁 黃偉哲 陳唐山 蕭美琴

立法院第 8 屆第 6 會期第 7 次會議議案關係文書

陳節如 周倪安 賴振昌 邱文彥 鄭天財
劉建國

立法院第 8 屆第 6 會期第 7 次會議議案關係文書

國防法第十四條條文修正草案對照表

修 正 條 文	現 行 條 文	說 明
第十四條 軍隊指揮事項如下： 一、軍隊人事管理與勤務。 二、軍事情報之蒐集及研判。 三、作戰序列、作戰計畫之策定及執行。 四、軍隊之部署運用及訓練。 五、軍隊動員整備及執行。 六、軍事準則之制頒及作戰研究發展。 七、獲得人員、裝備與補給品之分配及運用。 八、通信、資訊與電子戰之策劃及執行。 九、政治作戰之執行。 十、戰術及技術督察。 十一、國內外災害防救之執行。 十二、其他有關軍隊指揮事項。	第十四條 軍隊指揮事項如下： 一、軍隊人事管理與勤務。 二、軍事情報之蒐集及研判。 三、作戰序列、作戰計畫之策定及執行。 四、軍隊之部署運用及訓練。 五、軍隊動員整備及執行。 六、軍事準則之制頒及作戰研究發展。 七、獲得人員、裝備與補給品之分配及運用。 八、通信、資訊與電子戰之策劃及執行。 九、政治作戰之執行。 十、戰術及技術督察。 十一、災害防救之執行。 十二、其他有關軍隊指揮事項。	一、本條第一項第十一款增列「國內外」。 二、增列文字補實國軍進行海外災害防救任務之法律授權不足之現況。

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廖祥順

盧天麟

蔡行健

蔡明憲

蘇紫雲

以及不具名的一位退役海軍少將

And an anonymous retired rear admiral

幕僚：黃柏彰 Staff: Paul HUANG

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