



文、圖 | 洪掊論

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東北季風期間 大陸漁船越區捕魚或避風 海巡艦艇 難以出勤驅離之探討

Examining what keeps Coast Guard cutters and vessels from expelling Mainland fishing vessels' trespassing for illegal fishing and/or seeking shelter against gusty winds during the Northeast trade wind period

本總局巡防艦外觀

A snapshot on the exteriors of the DGMP bureau's patrol cutters





前言

在每年東北季風期間，大陸漁船頻頻越區至台灣北部彭佳嶼外海、台灣中部新竹、苗栗、台中外海及澎湖海域等非法集結捕魚或避風，嚴重影響我方漁民權益及海洋生態環境資源。

為維護我國漁業資源、海洋環境及漁民海上作業安全，許署長一再宣示本署護民護漁及淨化我方管轄海域之決心，為加強驅離入侵我限制及禁止水域之大陸漁船，海洋總局已積極規劃相關掃蕩勤務作為，並將取締大陸漁船越區捕魚列為年度重點工作。然而，於東北季風期間，巡防艦艇礙於海上風浪過大，有時無法順利出勤前往驅離，謹就相關原因加以檢討分析，並研擬因應對策。

大陸漁船越界捕魚情況分析

一、大陸漁船易集結區域

每年東北季風期間，在臺灣海峽作業的大陸漁船經常越區進入我方限制及禁止水域作業，各海域大陸漁船分佈情形如下：

- (一) 北部海域：以彭佳嶼外海為主。
- (二) 中部海域：以新竹至後龍外海、通霄電廠、彰濱工業區、麥寮工業港等海域為主。
- (三) 澎湖海域：以目斗嶼、姑婆嶼、七美嶼、東吉嶼、西吉嶼、花嶼、貓嶼等海域為主。
- (四) 金門海域：大多集中於大岩嶼群礁至塔山一帶、小金門東崗至復興嶼海域及大膽、二膽間之水道。
- (五) 馬祖海域：多集中於高登島西側、大坵與北竿之間、南竿黃官嶼、西側鐵板村、馬港村、四維村沿岸、東、西莒水道、東引、西引等海域。

Foreword

During the northeast trade wind period every year, Mainland Chinese fishing boats frequently trespass and congregate to northern Taiwan's offshore of Pongjia islet, central Taiwan's offshore coast of Hsinchu, Miaoli and Taichung, and the peripheral sea areas of the Penghu Island in search of illegal fishing and/or seeking shelter against gusty trade winds, which pose severe impact to the equity of Taiwanese fishermen, marine ecology, and environmental resources.

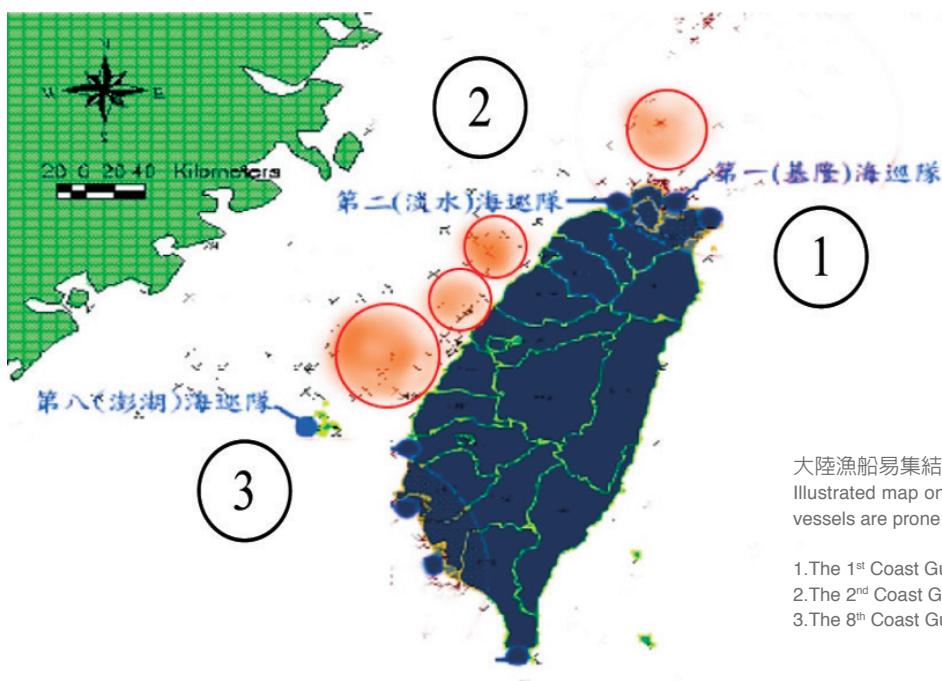
To safeguard Taiwan's fishery resources, marine environment, and fishermen's operation safety at sea, Minister Hsu, the head of Coast Guard Administration, Executive Yuan has repeatedly declare the administration's determination in protecting the fishermen, fishing sites and safeguarding Taiwan's sea territories. To step up expelling Mainland Chinese fishing boats that trespass Taiwan's restricted and banned sea territories, the Directorate General of Maritime Patrol Bureau of the Coast Guard Administration is actively staging relevant clampdown missions, and has enlisted cracking down illicit mainland fishing boats' trespassing for fishing as a focus of its annually implementation plan. However, during the northeast trade wind period, excessive ocean waves may sometimes prevent the Coast Guard cutters and vessels from sailing successfully to carry out the expelling mission; below provides a concise analysis on relevant causes, and with countermeasures drafted.

Analyzing the status of mainland vessels in various sea territories

I. Areas that Mainland fishing vessels are prone to congregate

During the northeast trade wind period every year, mainland Chinese fishing boats working in the Taiwan Strait often trespass into Taiwan's restricted and banned waters; the status of distribution of mainland fishing boats by sea territories are as follows,

- 1.)The northern sea territories: Mainland fishing vessels tend to congregate on the offshore of the Pongjia islet.
- 2.)The central sea territories: Mainland fishing vessels tend to congregate along the coastal offshore spanning from Hsinchu to Houlung, covering the Tungshiao power plant, Zhangbin Industrial Zone, Mailiao Industrial Port and so forth.
- 3.)The Penghu sea territories: Mainland fishing vessels tend to congregate in the peripheral offshore of the Mu Dou islet, Gu Poh islet, Chi Mei islet, Dong Jih islet, Shih Chi islet, Hua islet, Mao islet and so forth.
- 4.)The Kinmen sea territories: Mainland fishing vessels tend to congregate along the Dayen islet to Ta Shan, the water areas from Little Kinmen's Dong Gang to Fuhxing islet, and the waterways between Da Dan and Er Dan.
- 5.)The Matsu sea territories: Mainland fishing vessels tend to congregate along the waters west to the Gaodeng Island, and between Da Chu and Bei Gan, Nan Gan's Huangguan islet, west to costal area of Tiehban Village, Magang Village and Shihwei Village, the waterways of Dongchu and Shihchu, and around Dongyin and Shihyin.



大陸漁船易集結海域示意圖
Illustrated map on areas that Mainland fishing vessels are prone to congregate

- 1.The 1st Coast Guard (Keelung) patrol flotilla
- 2.The 2nd Coast Guard (Tamsui) patrol flotilla
- 3.The 8th Coast Guard (Penghu) patrol flotilla

二、各海域大陸漁船形態分析

各海域經常越區捕魚之大陸漁船形態分析如下：

II. Analyzing the status of Mainland fishing vessels in various types

An analysis on the state of sea territories in which Mainland fishing vessels tend to illegal fishing engage in illegal breach of fishing

表 1：各海域越區捕魚大陸漁船形態分析

海域	類 別	船型及構造	母港距離	作業方式
北部海域	以閩長漁、閩連漁為主	鐵殼船，船長約 25 至 30 公尺，單居，噸位約 200 至 300，船速約 8 至 10 節，船員數約 8 至 12 人	母港為福建省長樂縣、連江縣，距基隆海域約 117 哩	以單、雙拖、延繩釣及流刺網為主
中部海域	以閩獅漁、閩晉漁為主	鐵殼船，船長約 25 至 30 公尺，單車，噸位約 80 至 150，船速約 10 節，船員數約 12 至 16 人	母港為福建省石獅市、晉江縣，距台中海域約 130 哩	以單拖網作業為主
澎湖海域	以閩龍漁、閩獅漁、閩晉漁為主	鐵殼船，船長約 30 公尺，單車，噸位約 100 至 150，船速約 10 至 14 節，船員數約 12 至 16 人	母港為福建省龍海市、石獅市、晉江縣，距澎湖海域約 56 哩	以滾輪式及單拖網作業為主
金門海域	以閩龍漁、閩廈漁、閩閩漁為主	多為中、小型木質漁船或舢舨，船長約 8 至 12 公尺，船員數約 4 至 6 人	母港為福建省龍海市、廈門市、福州市，距金門海域約 10 哩	以流刺網及單、雙拖網作業為主
馬祖海域	以閩連漁、閩連農、閩平漁、閩長漁為主	木質漁船噸位約 20 至 70，船速約 10 節，船員約 6 至 7 人；鐵殼漁船噸位約 150，船員 10 至 12 人	母港為福建省連江縣、平潭縣、長樂縣，距馬祖海域約 7 哩	以雙拖網作業為主，經常群聚集體行動



Table-1 An analysis on the types of Mainland fishing vessels which tend to trespass for illegal fishing

Sea territories	Type	Vessel model and construction	Distance to mother port	Operating mode
Northern sea territories	Largely of Min Chang fishing boat, Min Lien fishing boats	Steel hull ship, measuring approx. 25 to 30 meters long, single propellant, with a tonnage at approx. 200 to 300, and boat speed of approx. 8 to 10 knots, carrying a crew of roughly 8 to 12	The mother ports being Changlo County, Fujian province, Lienjiang county, roughly 117 nautical miles from keeling sea territories	Largely taking to single and double tow net fishing, rope fishing and drag net fishing
Central sea territories	Largely of Min Shih fishing boats, Min Jin fishing boats	Steel hull ship, measuring approx. 25 to 30 meters, single propellant, with a tonnage at approx. 80 to 150, and a boat speed approx. 10 knots, carrying a crew of approx. 12 to 16	The mother ports being Shihshih city, Fujian province, Jinjiang county, roughly 130 nautical mile from Taichung sea territories	Large taking to single tow net
Penghu sea territories	Largely of Min Lung fishing boats, min Shih fishing boats, and Min Jin fishing boats	Steel hull ship, measuring approx. 30 meters, single propellant, with a tonnage at approx. 100 to 150, and a boat speed of 10 to 14 knots, carrying a crew of approx. 12 to 16	The mother ports being Lunghai city, Shihshih city, Fujian province, Jinjiang county, roughly 56 nautical miles from Penghu sea territories	Largely taking to roller and single tow net
Kinmen sea territories	Largely of Min Lung boats, Min Shia boats, Min Min boats	Largely of medium and small wooden fishing boats or sampans	The mother ports being Lunghai city, Shiamen city, Fuzhou city of Fujian province, approx. 10 nautical miles from Kinmen sea territories	Largely taking of drag net, single and double tow net fishing
Matsu sea territories	Largely of Min Lien boats, Min Lien Non, Min Ping boats, Mi Chang boats	Wooden fishing vessels with a tonnage of approx. 20 to 70, a boat speed of 10 knots, carrying a crew of approx. 6 - 7; steel hull fishing ships with a tonnage of approx. 150, carrying a crew of 10 to 12	The mother ports being Lienjiang county, Changping county, Changleh county, Fujian province, approx. 7 nautical miles from Matsu sea territories	Largely taking to double tow net fishing and often congregate in group actions

巡防艦艇與大陸漁船之比較分析

在東北季風期間，為何在同樣風浪險惡的情況下，大陸漁船可以越區捕魚或在海上活動，而性能優異之巡防艦艇卻時而無法馳赴現場，執行驅離任務？謹就船舶結構設計、地理環境、出海時機、作業方式等差異性加以比較分析。

一、船舶結構設計之差異

由於巡防艦艇與大陸漁船之功能需求截然不同，因此兩者之船型、結構設計等亦大異其趣。巡防艦艇為執行海域巡防、海上犯

A comparative analysis on patrol cutters and vessels vs. mainland fishing vessels

During the northeast trade wind period, under the same tough conditions of winds and waves, why is it that Mainland fishing vessels are able to trespass for fishing or maneuver at sea, whereas the well-equipped patrol cutters and vessels are unable to steer to the site to carry out expelling missions? A comparative analysis focusing on the differences in the ship structural design, geographical environment, timing of launching sail, and operating means is provided.

I. The dissimilarities in vessel structural design

With distinct differences in functional requirements, the ship model, structural design between the patrol cutters and vessels and Mainland fishing vessels are also differ drastically. In support of the duty needs in maritime patrol, maritime crime interdiction, maritime



罪查緝、海難救助、海洋環境保護、漁業資源巡護等任務需要，講求機動、快速，因此其船舶設計著重於高船速、低浪阻，相對的，其耐浪性較差；而大陸漁船為了在海上長時間作業，其船舶設計著重於高穩度、高耐浪性，相對的，其船速較慢。詳如下表所列之比較分析：

distress rescue, marine environment protection, fishery resources patrol and protection, the patrol cutters and vessels need to be mobile and fast, hence the vessel designs tend to focus on high speed, low wave resistance, yet relatively less wave endurance. Whereas in order to operate at the sea for long endurance, the vessel design of mainland fishing vessels tends to focus on a high stability, high wave resistance, and relatively a slower boat speed. For further details, refer to the following charted comparative analysis,

表 2：巡防艦艇與大陸漁船在船舶結構設計上之比較分析

區別	巡防艦艇	大陸漁船
材質	1 百噸級以上為鋼質，未滿 1 百噸級多為玻璃纖維材質（FRP）。	大部分為鋼質，少部分為木質。
噸位	各機動海巡隊巡防艦約為 500 至 1900，直屬船隊巡護船約為 130 至 800，其餘海巡隊巡防艇均為 150 以下。	金、馬海域大陸漁船噸位較小，約 20 至 100，其餘海域約 100 至 200。
船體結構	船型瘦長，船體輕薄，航行阻力較小，但較不耐浪擊，且船身橫搖、俯仰及起伏幅度較大。	船型圓滿，船艏高，船尾低，船體厚實堅固，較不受浪擊影響，船身橫搖、俯仰及起伏幅度較小，但航行阻力較大。
性能設計	主機轉速高、船速快，巡防艦最大速率可達 30 節，巡防艇最大速率可達 45 節，GM 值較高，扶正力矩較大，不易翻覆，安全性高，但搖晃頻率較高。	主機轉速低，船速慢，最大速率約 15 節，GM 值較低，扶正力矩較小，搖晃頻率較低，但容易翻覆，安全性較低。
受風浪影響	乾舷較高，受風面較大，耐浪性較差，風力 6 至 7 級時，頂浪及橫浪航行困難，風力達 8 級以上時，船體搖晃及震動劇烈，易造成船體結構損壞。	乾舷較低，受風面較小，耐浪性較佳，頂浪及橫浪航行時阻力大，故航行速度緩慢，但船體搖晃及震動較小，惟如風浪過大，船舶易進水沉沒，對航安構成威脅。
耐海性	巡防艦為 9 級，巡護船為 8 級，巡防艇為 5 至 8 級。	大陸漁船約為 9 至 10 級。

Table-2 A comparative analysis on the vessel structural design between the patrol cutters and vessels versus Mainland fishing vessels

Distinction	Defense patrol cutters/vessels	Mainland fishing vessels
Material	Those over 100 tons are in steel, and under 100 tons are largely in fiber reinforced plastic material	A majority being steel built, and a small percentage wooden
Tonnage	The tonnage of patrol vessels at various mobile squads is roughly from 500 to 1900 tons, and direct access fleet fishery escort ships is roughly from 130 to 800, and the rest of the Coast Guard patrol vessels is under 150	The tonnage of mainland fishing vessels in the Kinmen and Matsu sea territories is relatively smaller, at roughly from 20 to 100 tons, and that in the rest of the sea territories is roughly from 100 to 200 tons.
Ship hull structure	The ship hull tends to be narrow and lightweight, which creates less drag in sailing but less enduring to the waves, notwithstanding that the ship hull tends to rock laterally, with greater amplitude of pitching and rolling.	The ship hull tends to be rounded with a high bow and a low stern, with ship hull in a rigid built that is less prone to be affected by waves, and less susceptible to lateral wobble, and smaller amplitude of pitching and rolling, but at a greater drag in sailing.
Functional design	The main engine rotates at a high speed, and sails at a fast speed; patrol cutters reach a maximum speed of 30 knots, patrol vessels 45 knots, with a higher GM ratio, and a larger self-righting capability; less prone to capsize, higher safety, but much higher shaking frequency.	The main engine rotates at a low speed, and sails at a low speed, with maximum speed at roughly 15 knots, and a lower GM ratio, with a relatively smaller alignment propensity, lower wobbling frequency but tend to capsize and relatively less safety.
Susceptibility to winds and waves	The dry bow being higher, with larger wind surface, and a lesser wave resistance; navigation could stall when encountering head wave or side way at winds of level 6 to 7, and the ship hull tends to wobble and shake violently when winds reach level 8, which is prone to lead to damage to ship hull structure.	The dry bow being lower with a smaller wind surface, and a relatively superior wind resistance; with a higher drag when sailing against head wave and side wave, the sailing speed tends to be slow, but with a lesser wobble and vibration on ship hull; however, water tends to get into the vessel at high wind and wave, creating threat against navigation safety
Sea state endurance	The patrol cutters are on level 9, the escort ships are level 8, and the patrol vessels are level 5 to 8.	Mainland fishing vessels are roughly on level 9 to 10.

二、地理環境之差異

(一) 東北季風的影響

東北季風主要來自北方大陸高氣壓，其方向係由東北往西南吹拂，正好是大陸往台灣的方向，當大陸漁船出海作業，

II. The dissimilarities in geographical environment

1. The impact of the northeast trade wind

With northeast trade winds largely stem from the high pressure coming from China's northern area, blowing in a direction from northeast to southwest, exactly the direction from China to Taiwan, heading along the direction from China toward Taiwan

由大陸往台灣的方向航行適為順浪；而各海巡隊艦艇出勤前往驅離，則必須頂浪或側浪前進，航行較為困難。

（二）狹管效應

當大陸北方寬廣地區的冷空氣沿台灣海峽南下時，因地形擠壓助長此氣壓梯度，使風速大為增強，進而影響海面湧浪，促使台灣西部海域風浪較其他地區強烈，形成「狹管效應」。而巡防艦艇出勤前往驅離大陸漁船，均須通過台灣西部海域，礙於海象惡劣，船艙顛簸加劇，航行風險大增。

（三）海岸地形的影響

由於台灣海峽為南北向的狹窄水道，波浪能量受地形限制，使波浪伴隨風勢而增強，而西部海域自桃園縣觀音往南海域，海岸線走向筆直約呈210度，與東北季風之風向相同，且新竹、台中地區海域無天然之地形屏障，位居該地區海巡隊（如新竹、台中、中部地區機動海巡隊）之巡防艦艇出海取締大陸漁船時，在東北季風強勁的海象下，形成側浪，不利於航行。反之，在台灣西部海域越區捕魚之大陸漁船，於東北季風增強、海象不佳時，多選擇至澎湖海域各離島之背風處避風，藉由地形所造成之「阻浪效應」，風浪可較外海減低約2至3級。

三、出海（勤）時機之差異

通常大陸漁船自大陸出海時，多選擇風浪較小時出發，再伺機進入我方限制及禁止水域作業，當海面風浪增強無法作業時，則就近至各離島沿岸避風；反之，當本總局各海巡隊接獲大陸漁船越區捕魚或聚集避風之通報，派遣巡防艦艇出勤前往驅離時，正值風急浪高、海象惡劣之際，形成「敵逸我勞」之勢，更增添執勤難度。

四、作業方式之差異

大陸漁船噸位多介於100至200之間，作業時船速低於5節，加以拖網作業時，可產生「傘錨效應」，除可穩定船身外，更可減少搖擺頻率，增加滯海時間；而本總局巡

has been a smooth sailing when Mainland fishing boats set sail. Whereas when various Coast Guard flotillas deploy the patrol cutters and vessels to expel the fishing boats, they need to maintain against the head waves or side waves that only make the navigation more difficult.

2. Corridor effect

When the cold air from Northern Mainland's wide open area blows south along the Taiwan Strait, the wind speed tends to pick up as the geography accelerates the barometric scale, which in turn churns up the waves at sea, besieging Taiwan's western regions with stronger winds and waves than the other areas, creating the so-called corridor effect. Yet this being the waterway that Coast Guard patrol cutters and vessels must pass through in order to get to the fishing sites to expel Mainland fishing vessels, where the nasty sea state only sent the vessels rocking and greatly excel the risks in navigation.

3. The impact of the coastal terrain

With Taiwan Strait being a north-southward narrow waterway, the waves tend to accelerate alongside the wind as curtailed by the geographical terrain constraints, and the coastline of the western sea territories from Guanyin, Taoyuan County to the southern sea territories is in a straight down 210 degree projection, which roughly along the direction of the northeast trade wind. Besides the sea territories in the Hsinchu and Taichung areas also



大陸漁船外觀
A snapshot on the exteriors of a Mainland fishing vessel



lack of natural terrain barrier, the patrol cutters at Coast Guard flotillas in these areas (such as the Coast Guard flotilla in Hsinchu, Taichung and the central region mobile flotilla) launching sail to crack down against mainland fishing vessels would tend to encounter side waves, as influenced by the strong northeast trade winds, hindering the navigation to be difficult. On the contrary, mainland fishing vessels trespassing to fish in Taiwan's southern sea territories often choose to seek shelter at various offshore islands in the Penghu sea territories when the northeast trade winds pick up, and the sea state turn nasty, where the wave countering effect created from the terrain could reduce the choppy waves by roughly 2 to 3 levels than that in the open seas.

III. The dissimilarities in timing of setting sail

When setting sail from the mainland, mainland fishing vessels tend to choose a time when the waves are relatively calm, and queue for the right moment to trespass into Taiwan's

restricted or banned water territories, and would seek shelter at various offshore islands when winds and waves at sea prevent them from fishing. On the contrary, when obtaining the reports of mainland fishing vessels' trespassing for fishing or congregating for sheltering, the Director General of Maritime Patrol (DGMP) bureau's various Coast Guard flotillas would then deploy the patrol cutters and vessels to conduct expel action at a time when the winds and waves are at an all-time high and the sea state at the worst possible state, which only lead to fighting a tough battle while the rival is at ease, only to add to the difficulty of duty enforcement.

IV. The dissimilarities in operating mode

With the tonnage of mainland fishing boats tends to fall between 100 and 200, with an operating speed at 5 knots, coupled with the umbrella anchor effect in the tow net process, this not only helps to stabilize the ship hull but also reduce the frequency of wobbling, hence extending the time of staying at sea. Whereas the DGMP bureau's patrol cutters and vessels are designed as high-speed vessels that have the main engine rotating at a higher speed, with a boat speed reaching 9 knots or higher when weighed down with-

本總局巡防艇外觀
A snapshot on the exteriors of the
DGMP bureau's patrol cutters





防艦艇設計為高速船艇，主機轉速較高，在掛車不加速的狀況下，船速即可達9節以上，遇海象不佳時，船身搖擺加劇，不易久留。

因應對策

綜合上述之檢討分析，巡防艦艇與大陸漁船在各方面存有明顯差異，為加強取締大陸漁船越區捕魚，有效淨化我限制及禁止水域，必須採行科學化之勤務規劃、靈活化之勤務調度、有效化之勤務作為以因應，相關因應對策如下：

一、有效運用大型船艦，提升掃蕩勤務效能

由於東北季風期間海象不佳，一般巡防艇因噸位小，常礙於海上風浪過大無法出勤，必須有效運用大型船艦實施掃蕩勤務，依大陸漁船易聚集海域，劃分責任區域，由北機隊及中機隊派遣大型艦負責執行新竹至苗栗一帶海域之掃蕩勤務；由南機隊及直屬船隊派遣大型艦、船負責澎湖周邊海域之掃蕩勤務，以提升勤務效能。

二、海空聯合偵巡，提升查緝成效

為機先掌握大陸漁船行蹤，避免巡防艦艇徒勞無功，於實施掃蕩勤務前，宜配合申請空中勤務總隊派遣直昇機支援，藉由海空聯合偵巡，正確掌握目標位置，以提昇驅離及取締成效。

三、延長勤務時間，減少往返航程

為減少巡防艦往返奔波航程、節省油料成本，各艦威力掃蕩勤務之規劃，由原來每次3天延長至6天，以增加滯海時間，提升執勤效率和威嚇效果。

四、善用天候海象，掌握勤務實施時機

大陸漁船在海象良好時，多分散於外海拖網作業，遇天候海象轉趨惡劣時，則紛紛航向各離島沿岸避風，若此時始規劃掃蕩勤務，迭因巡防艦艇無法突破風浪險阻，而徒

out acceleration, yet the ship hull tends to wobble aggregately at times of poor sea state to deprive ships from overstaying.

Countermeasure strategies

Recapping the foresaid overview analysis, there are obvious differences between the patrol cutters and vessels versus mainland fishing vessels. To step up cracking down mainland fishing vessels' trespassing for fishing, and to effective sweep out Taiwan's restricted and banned sea territories, there is a need to adopt scientific duty planning that allows a flexible duty dispatch and optimized duty enforcement as the countermeasures; relevant countermeasures are as follows,

1. Making smart utilization of large-scale vessels to enhance wipe-out mission effectiveness

As marred by the poor sea state during the northeast trade wind period, and as common patrol vessels tend not able to serve duty as hindered by excessive winds and choppy waves at sea, it is prudent that large-scale vessels to conduct the wiping out duty by dividing responsible sea areas according to areas that mainland fishing vessels tend to congregate, where the northern and central mobile flotillas could dispatch large-scale cutters to conduct wiping out duties along the sea territories from Hsinchu to Miaoli, and the southern mobile flotilla and Coast Guard direct access fleets could dispatch large-scale cutters and vessels to conduct wiping out duties in the Penghu's peripheral sea territories to excel the effectiveness of service duty.

2. Deploying joint aerial and sea surveillance patrol to improve crackdown effectiveness

To seize grappling the whereabouts of mainland fishing vessels that would help to avoid idle trips deploying the cutters and ships, it is prudent to appeal request with the aerial duty squadron to dispatch helicopter support prior to launching a sweeping mission by utilizing a joint aerial and sea surveillance to accurately pinpoint the location of the target, and to excel the expulsion and crackdown effectiveness.

3. Extending the duty patrol time to reduce the navigation distance to and from

To cut down the patrol cutters and vessels' running back and forth in navigation, and to conserve the fuel cost, it is best to extend the dynamic sweeping duty for all vessels from the previous 3-day duty to a 6-day duty that would poise to extend the sea navigation timing, and improve the mission execution efficiency and deterrence effectiveness.

4. Making smart use of the climate and sea states to grasp timing of duty implementation

In good sea state, mainland fishing vessels tend to scatter about in the open seas conducting tow net operations, and in the event the sea state turn nasty, they would then seek shelter by sailing towards various offshore islands. If a wiping out duty is launched at this time, there is a high tendency that the mission will be rendered idle as the patrol cutters and vessels would not be able to approach the site, and



勞無功，即使勉強抵達，亦無法登檢或實施強制作為，因此應善用天候海象，於東北季風增強、風浪轉差前先行實施威力掃蕩，使大陸漁船無法接近我方海域，才是淨化海域較佳之時機。

五、派遣大型艦鎮守澎湖，加強重點海域勤務能量

由於澎湖海域距離大陸漁船母港較近，大陸漁船越區捕魚情形較為嚴重，且澎湖海域離島眾多，提供大陸漁船良好之避風處所，而澎湖海巡隊所屬巡防艇均為100噸級以下，遇海象惡劣時難以遂行掃蕩勤務，為加強該海域勤務能量，應規劃派遣大型艦長期駐守澎湖海域，可就近執行掃蕩勤務，大幅減少往返航程，發揮最大嚇阻效果。

（作者任職於海洋巡防總局海務組）

even if they manage to make it, it would not be feasible to conduct onboard inspection or carry out mandatory expulsion. Hence it is prudent make smart use of the weather conditions by deploying wiping out missions before the northeast trade winds accelerate and the waves turn nasty, a more preferred timing to wipe out the sea territories and keep mainland fishing vessels from coming near our sea territories.

5. Deploying large-scale cutters and vessels for stabilizing Penghu to step up focus sea territory duty enforcement dynamics

In light of that the Penghu sea territories being closer to the mother ports of Mainland fishing vessels, the situation of Mainland fishing vessels trespassing for fishing is deemed more severe, notwithstanding a large number of archipelagoes in the Penghu sea territories that also provide a good shelter for Mainland fishing boats to hide. With Penghu Coast Guard flotilla's patrol cutters and vessels rated at below the 100-ton grade, which tend to prevent them from carrying out wiping out missions in the event of nasty sea state, in an effort to excel the mission execution dynamics in the water region, it is best to dispatch large-scale vessels to station long-term at the Penghu sea territories that would allow wiping out missions be carried out swiftly to greatly cut down the navigation distance to and from, in order to excel maximum deterrence effectiveness.

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本總局巡防艇與大陸漁船外觀之比較

A comparison snapshot on the exterior of the DGMP bureau's patrol vessel versus a Mainland fishing vessel