

Cooperative Maritime Search and Rescue in the Indian Ocean Region

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Ladies and Gentlemen,

It is great to talk to you this afternoon. I know some in the audience will have heard me speaking or have received my letters over the last two years or so. So, I will be brief and I will confine my comments on the specific interest where been asked to talk about today. That is a brief presentation on Cooperative Maritime Search and Rescue in the Indian Ocean Region.

In doing so, I would like to highlight key issues up-front so that we understand ‘Why’ cooperation is important to us in IONS, and ‘what’ aspects are truly relevant to us as we chart our course forward. I will take the opportunity to use practical examples, namely lessons learned from the search operations in support of Malaysian Airlines Flight 370, contemporary scenarios and the 2004 Tsunami ten years ago but equally applicable to highlight where we may focus our future efforts.

At the outset, I wish to pay my respects to the families and friends of all those who lost their lives during these tragic events and to all others that have been similarly impacted in other disasters in this region. And I do thank those nations who have assisted in these cooperative operations.

So, let me just start why it is important for us. It is important for us to appreciate that to gain legitimacy and credibility as an effective conglomerate; we need to be realizing gains that have tangible outcomes. I highlighted it in the morning, when I gave my first presentation. We must know where we have come from and where we are going to. We must know where our strengths lie and where we

have weaknesses. We must have an appetite and thirst to constantly build and improve.

Now as I said this morning, the Working Groups established within IONS offer us the platforms from which we can achieve inward reflection and develop tangible steps to improve the collective value of this organization. Therefore, my aim for this afternoon is to support the future work of the IONS working groups, especially the Humanitarian Assistance and Disaster Relief (HADR) Working Group (WG) and the Information Sharing and Interoperability WG to understand what issues they need to consider under the new chairmanship when focusing on Maritime Search and Rescue.

Now the previous speaker used poetry to express his poet. So let me do the same. It was the great British writer, Samuel Taylor Coleridge, who wrote in his colossal poem, *The Rime of the Ancient Mariner*:

“Water, water everywhere and all the boards did shrink; water, water everywhere, not any drop to drink.....”

Nowhere do these words ring truer than for the Indian Ocean—An ocean where vast distances extend our reasoning like none other.

In this context, Australia’s seaside abuts this pristine ocean, yet any time I task my ships to deploy to this area I know that we are embarking on a significant activity. For example, a deployment to the Persian Gulf from our naval Base in Western Australia is a similar distance of a return transit from London to the Suez Canal. This is a reality we all face. And I know I am preaching to the converted as many of our Navies are spending more time in the Indian Ocean

and its approaches in an effort to bring stability and security to trade routes that feed the World's economy and affect us as well.

Importantly, this is an oceanic region where maritime response requires strategic vision and, in the case of Search and Rescue, a common endeavor. Sadly, as we found in 2014, the tyranny of maritime distance was exactly what the search for MH370 caught-up for us.

The search has, and remains, an international effort. Indeed the search of the northern and southern corridors involved 26 nations. In the southern corridor, search assets included ships and aircraft from Australia, China, Malaysia, the United States, the United Kingdom, New Zealand, Japan and South Korea.

The lessons the Royal Australian Navy learned from this operation will not surprise anyone here in their fundamental direction – most of the lessons were associated with communication and logistics. What will be of particular interest is the scale and complexity of the challenges inherent in these lessons.

For medium sized navies, the scale and complexity is considerable - I suggest it would be similar for a large navy. However, for small naval forces could find such activities quite overwhelming. So as we consider the lessons learned, I think it is worth reflecting on how they can affect different naval forces, and what that means for the way in which we cooperate. The breadth and depth of the tragedy of Flight MH370 was matched only by the swiftness and scale of the response. When looking at the response generated, I am reminded of the global nature of our lives – no single nation could have conducted this search on their own.

The nations which responded demonstrated some of the classic features of maritime power. The readiness and adaptability to respond at short notice; strategic mobility and reach to deploy to one of the most distant locations in the oceans of the world; the persistence to be able to stay on task for a prolonged period of time. And they demonstrate the ability to cooperate for common purpose.

When we look at MH370, many of the elements required for successful cooperation are evident: transparency, a disposition to share, a mechanism to share and a willingness to act together.

The MH370 search has had several components to it. Initially it was a surface search, with the hope of survivors, but then quickly increasing the area was a search for any debris. Using the mutually supporting capabilities of the ships and aircraft involved, the surface search covered an area larger than the Mediterranean Sea. Over 3 million square kilometers were searched. And this was achieved at a huge distance from the nearest ports and air bases – transit distances between 600 and 1500 nautical miles were common – the equivalent of searching the Mediterranean with assets based in Denmark.

The translation of theory into practice resulted in what I consider to be a very impressive search, not just for the scale of it, but for the speed with which it occurred. The major challenge was to define the search datum. Obviously the distance from operating bases was one challenge, as was the size of the search areas. But the factor which is slightly less apparent is the distances by which the search boxes moved. Because defining the search datum required some standard methods of determining the aircraft's track, the search boxes moved by large distances as the surface and acoustic searches progressed. And even now as we

enter what will be the final period of search we find ourselves further consolidating our search in the southern region.

Now, moving on to some of the specific lessons learned. The first lesson to be drawn from the search for MH370 is the need for clear and predictable communications. This lesson will come back to us in many different forms as it underpins just about every aspect of cooperation – strategic direction, planning, and conduct of operations and media management. It has technical, procedural and cultural aspects to it. Technical, because we need to have compatible systems, which can talk to each other when required. Procedural, because the requirements for decision-making and the level at which decisions are made can vary between nations. Cultural, because communication is much more than just the systems and the words we use – it is all about the meaning we try to convey.

During the MH370 search, it was clear that, for example, the participating nations have different procedures and methods for operational decision making. In Australia we try to drive the decision-making to the level which has the best ability to make a decision – to understand and to effect the decision. We also tend to have a matrix of communication methods surrounding the formal command and control system. Often we try to conduct direct communications at a lower or more tactical level.

But not everyone adopts the same approach and this is not a criticism. It is a reflection that we do things differently. To maximize our ability to cooperate effectively, we need to find ways of communicating which are mutually understood.

The second lesson is the utility of liaison officers. One of the most effective ways to enhance communications is the provision of liaison officers. Participating agencies should deploy liaison officers to the lead or the

coordinating headquarters as early as possible. Liaison staff should have the ability to cover planning, operations and public affairs as these are the most time sensitive tasks.

This is a wide skill set and so more than one liaison officer may be necessary. Even just looking at languages, the MH370 search had native speakers of five different languages, so these skills were highly valued. But importantly, liaison officers must be of high quality and they must be trusted. They must have the ability to establish trust in the headquarters to which they are deployed – and they must be able to understand the circumstances and organisation of their hosts. They need to have effective communications both back to their own organisation and also forward to their deployed assets. Liaison staff should be given the maximum possible freedom – building trust is key.

The location of liaison staff must be kept under constant review – as the operation develops, it may be necessary to deploy liaison staff forward to facilitate better tactical communications. By the end of the surface and beacon search phase, liaison officers had been employed at both headquarters, air operating bases and in deployed units at sea. Moving on to such a model as early as possible is likely to be of great value in future.

A third lesson is that liaison officers are not only necessary between nations – they will often be needed between agencies of one nation. SAR and HADR operations are often led by civilian agencies, but for large-scale events the majority of the first response assets will be military. We in IONS need to have an understanding of what other organisations, such as the Indian Ocean Rim Association, are doing on the civilian SAR environment and how we can interface with these civilian agencies when required.

The civilian agency may not have a good understanding of the capability of the military assets or the military organisation which directs them. For example, militaries are typically better able to conduct concurrent planning and operations in a confused environment. Military liaison officers deployed to the lead civilian agency are able to provide specialist advice which means military assets can be employed to best effect.

At this point it is worth noting that such a multi-national search provides for a complex command and control environment. Providing the information each nation needs to inform its decision-making is an important task and one which liaison officers are key to facilitating.

A fourth lesson is that coordination of public affairs information is a challenge. For an international event with a profile like that of the search for MH370, the thirst for information is massive. There were over 400 accredited media contacts; hundreds of specific media enquiries in addition to over 100 packages of media information that were pushed out by the Australian authorities. MH370 generated over 4 million tweets in the first two weeks after it disappeared. When the search moved to the Australian Search and Rescue zone, the number of followers of the Australian Maritime Safety Authority's Twitter Feed went from 1800 to 18,000 in a matter of days.

In the absence of information provided by the lead agency, media will try to find what stories they can. Often these may not be correct and can give unrealistic expectations, which can cause confusion as modern communications enable stories to spread very rapidly. The media reporting can become the issue and divert attention from the actual operation. With a multi-national search this challenge is compounded, as each nation naturally wants to keep their own

commands and their own media informed – meeting multiple government and media reporting deadlines requires mutual understanding, respect and patience.

The fifth lesson worthy of consideration is more technical – our ability to have a level of interoperable logistics. During the MH370 search, conducted over such a large area and in such a remote part of the Indian Ocean, it was fortunate that there were three replenishment vessels involved. The ability for HMAS SUCCESS to refuel KD LEKIU enabled the Royal Malaysian Navy to conduct searches where Australia did not have a vessel; it was a classic example where the whole was greater than the sum of the parts.

The endurance of the initial Chinese Task Group, which assisted in the surface and acoustic searches for several weeks, was achieved because of its at sea-replenishment capability. Looking to the future, there is merit in extending the logistics interoperability. Interoperability such as this during the MH370 search would have enabled more flexible use of scarce replenishment vessels for all participants. Cooperation between nations for these capability-multipliers would enable a wider circle of cooperation. Even though we have not yet been able to find the final resting place of the aircraft, a coalition of nations has conducted one of the most extensive air and sea searches in history. It has done so in one of the most difficult regions on earth.

Let me now turn to my second example. The South East Asian Tsunami on Boxing Day, 26 December 2004 also highlights similar lessons. But I could equally have chosen to have used the example of numerous devastating Typhoons in the area to highlight similar lessons. But note there are some unique lessons here as well. This was a natural disaster, like MH370 it was not predicted, but the response had to be immediate. This will have an effect on our preparedness and on our ability to quickly form coalitions to search and recover.

It will put an onus on all of us to have knowledge of each other's Civil and Military C2 arrangements.

Loss of port facilities can be expected which will complicate navigation and degrade previously existing communications architectures that might have been relied on for disaster response coordination, but also belies the inherent advantage of a maritime response and presence. Knowledge of the capabilities of other nations and services is required to effectively coordinate responses – offers of support can be overwhelming and selecting the right assets, especially in the early phases is critical. This is where I see value in developing an IONS Maritime Information Exchange Directory. Local knowledge and language is critical to success – this highlights again the value of embedded liaison officers.

So, here are some key take home points. Cooperation must be practiced frequently and routinely for it to be refined and enhanced. The habits of cooperation are developed over many years and over that time that builds relationships and trust, which enables more rapid and effective cooperation. This develops a virtuous circle of positively reinforcing activities. Mutual understanding, which underpins effective cooperation, is enhanced by the use of liaison officers. In addition to their practical uses, liaison officers are important symbols of transparency and trust. We have opportunities to build the habits of cooperation through routine activities, not just when emergencies occur. Major exercises such as RIMPAC are good examples. And institutions such as ASEAN, the Indian Ocean Rim Association, the Western Pacific and Indian Ocean Naval Symposiums can also play an important role to encourage forward looking cooperative activities.

The choice to cooperate and to collaborate – to collectively and consistently maintain good order at sea – is a choice to preserve and promote the security and

prosperity of all nations. So I ask, Isn't this the key of what IONS is trying to do at this time?

I trust this very quick presentation has allowed the members of the HADR and the Information Sharing and Interoperability Working Groups within IONS will consider some of the practical steps that we need to work on over the next couple of years.

Thank you.