Cyber-Warriors for Cyber-Space: What we can learn from the US Navy

Author: Rear Admiral Sudarshan Shrikhande (Retd)*

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On 04 Jun this year, the US Navy (USN) took a rather unusual step in reintroducing the Warrant Officer-I (W-I) rank and inviting applicants in this rank for cyber warfare.[1] The USN has had a complex history of warrant ranks as opposed to commissioned and non-commissioned ranks. The details of this history are not of direct interest to us. As such, the Royal Indian Navy (RIN) followed the Royal Navy (RN) in doing away with "Warrant Officer" ranks in 1949. (In comparison to the RN, the RIN had very few Indian WOs and not many Indian officers either.) For various reasons such as the dissatisfaction that RN WOs had with the social discrimination they faced from wardrooms and reduced promotional avenues, the ranks were abolished and Branch Lists were introduced. In 1965, Branch List was renamed Special Duties List. In the IN this has been a useful cadre of officers who have brought core professional knowledge and experience in pace with growing complexities of equipment and hardware as well as in training and maintenance.[2]

The USN's step is certainly worth considering. In relatively newer combat disciplines like cyber warfare there are problems with earlier methods that were more conservative and to use the catch-all phrase of not rocking the boat "time-tested" ways of recruiting and advancing sailors. As pointed out in the US media, the newer skills

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[1] https://www.public.navy.mil/bupers-npc/reference/messages/Documents/NAVADMINS/NAV2018/NAV18140.txt accessed on 14 Dec 2018. This is the equivalent of the Indian Navy's General messages issued by NHQ ("IGs") and kays down details of the decision and the modalities of induction and promotions that would govern this new cadre.

[2] Information collated from Blueprint to Bluewater: The Indian Navy 1951-1965, Rear Admiral Satyendra Singh, as well as https://www.naval-history.net/xGM-Pers-Warrant%20Rank.htm. This is a useful compilation in 1992 by LCDR Geoffrey Manson, RN (Retd).

required for in the cyber domain exist in just a few among the available pool of younger sailors in the USN. As reported by the "Navy Times" (by Mark D. Faram, 13 Dec 2018), this was because "cyber skills are in such demand in the civilian marketplace that many sailors weren't sticking around long enough to make chief petty officer, the traditional springboard for warrant ranks." As warrant officers they will get higher pay and benefits, greater status and more opportunities for promotions including to commissioned ranks.

Is there a need for the Indian Navy and indeed for the other two Services to adopt a similar approach? Can cyber- warfare or other niche skills required in space, intelligence and information operations be developed, retained and deployed with the existing arrangements for recruiting, training, paying and promoting? We regularly talk about the increasing importance of understanding and deploying higher technologies in most warfare areas and the criticality of skilling operators, grooming analysts and producing leaders in the very same areas. It is not surprising that the Army Chief, General Bipin Rawat has highlighted the challenges that technology presents during the 2018 MCETE Convocation in Secundrabad on 15 Dec. Senior leadership in other services have also expressed similar concerns.

Therefore, the Navy could think of leading the way by swiftly encouraging and selecting the "right stuff" that could form the inaugural cadré of the joint cyber command as well as at the single Service interfaces. Sailors so identified, and rigorously security- vetted, could then be skilled up and promoted to Petty Officer rank for a probation period and then incentivized for advancement to Chief Petty Officer, etc. Truly outstanding sailors could also be selected for early commissioning within the Special Duties List for cyber/ space and other niche warfare areas.

Does this sound undoable? Not at all! In fact, there are precedents and the closest model is, strangely, in a totally non- warfare and non-core area. Most naval readers would know of the rapid promotions that can be earned by "sports quota" sailor-entries depending on their performance in national and international events. This analyst does wish, as much as any other Indian, that our country of 1.3 billion people wins many more medals in all sports and necessary incentives be offered to sportspersons. However, not many nations, if any at all, have taken recourse to asking their armed forces to devote a fair bit of effort in recruiting such individuals and then spending relatively large amounts on infrastructure, sports nodes, coaches and exposure as have

Indian armed forces. All this is in a completely non- warfare area by any stretch of imagination! Therefore, this analyst feels that the responsibility for winning sports medals should be of departments and ministries whose task is to do so, not of the armed forces. We all remember earlier decades when a few officers and men got naturally selected for state and national level sports with some participating in international events, something that rarely happens now. Importantly, they continued to do their primary duties. Here is an illustrative digression: It may be of interest to note that General George S Patton-- no "sports quota entry"-- of the US Army was part of the American pentathlon team in the 1912 Olympics. Had he been taken in as a "sports quota entry", he may have won more sporting medals but not battles and campaigns! However, if such modalities for recruitment, skilling and fast- track promotions could be adopted by all Services (and there is currently very little jointness in this as well) then there is no reason for not doing so in core warfare areas where we already face problems. As far as this writer knows, the Navy can recruit potential sportsmen as senior sailors and the Army perhaps went a step further with an entry rank of a Naib Subedar (JCO). If such precedents exist in non-core areas, it should be certainly worth considering to be more future- ready in warfare disciplines.

Secondly, the IN, in continuing the inheritance from the RN, had a different set of intake standards, training pattern and service conditions for artificer entries. These entries have served the Navy very well. While there may have been the occasional hiccup, these were far outweighed by the advantages their skills brought to core-area efficiencies.

Services often talk about transformation. Technology of course is an important part, but transforming the way in which we can recruit, train, motivate, skill, deploy and lead our warriors is by far more important. No one could have said it better than Colonel John Boyd of the OODA loop fame: "People, Ideas, Things are what matter most and in that order." Cyber-warfare requires jointness and integration not only within Services but with quite a few civilian agencies who are all partners in this new warfare area. The Navy could perhaps take the lead in creating new cyber warriors that will be the cutting edge in monitoring and winning combat in cyber-space.

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The author is a former Rear Admiral of the Indian Navy. The views expressed are his own and do not reflect the official policy or position of the NMF, the Indian Navy, or the Government of India. He can be reached at syshrikhande@rediffmail.com