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Four Key Steps to Retaining Talent in the Information Warfare Community

By Dr. Mark E. Nissen and Dr. Simona L. Tick, Naval Postgraduate School - April-June 2017

The Navy Information Warfare Community (IWC) provides a vital, sophisticated capability to address increasingly dynamic and unpredictable threats around the world. The problem is the same skills and capabilities that make IWC personnel so valuable to the Navy also make them valuable to myriad firms in industry and organizations elsewhere beyond the Military Services. Moreover, such skills and capabilities are *directly transferrable* to industry, with numerous jobs offering considerably higher compensation levels. As a result, many talented information warriors are leaving the naval service at the midpoints of their military careers.

Further, unlike other Navy communities — such as aviation and nuclear, in which clear career guidance and well-established incentives (e.g., bonus and retention pay) are in place — the comparatively inchoate IWC does not appear to benefit similarly. A number of our IWC colleagues indicate that career guidance is inadequate, for instance, and some remain uncertain what to do next. Alternatively, other colleagues appear to understand what needs to be done next, but they express frustration at the limited number of opportunities for milestone tours and command.

Given the unique and nascent nature of the IWC, we set out to understand better how the Navy can retain more of its talented IWC personnel. Hence we conducted a thorough, grounded, scientific study, through which we interviewed a number of mid-grade officers (i.e., O3 and O4) pursuing graduate degrees at the Naval Postgraduate School (NPS). All of these officers were admitted to the NPS for degree work in fields related to the IWC; all were identified as part of a larger group of “talented” people; and all were interviewed anonymously, with encouragement and opportunity to be candid and forthcoming.

Interviews centered on open-ended questions pertaining to what they regard as “talent,” what aspects of the IWC are encouraging them to stay in the Navy, and what aspects are pushing them instead to leave.

In conjunction with the interviews, we employed a set of high-performance, qualitative, social science tools and techniques to understand the grounded data collected through our focused conversations. These include dual-level analytic coding, iterative data collection and analysis, triangulation across multiple data sources, member checking for reliability, and review with highly experienced IWC officers — in addition to talent and personnel experts.

We also had every interview participant review our transcripts and conclusions, and an advance copy of the findings and recommendations was circulated for comment. Collectively, these add great credibility to qualitative data collection and analysis, and they permit the interview data to speak for themselves, grounding our analysis, findings and conclusions in the words and views of IWC participants.

Results are enlightening, and interestingly, nearly half of our study participants indicate that they are likely to leave the Navy when the next opportunity arises. Further, we find that *talent* is a highly situated and nuanced concept — far from general and monolithic — that is aligned with a person’s knowledge and capability within an organization setting: information technology technical knowledge and the competence that it enables are fundamental to IWC talent, but we also find nuanced differences across “tribes” and between people in different designators.

Speaking generally, for cryptologic warfare (1810) and cyber warfare engineer (1840) officers, IT technical knowledge and the ability to take effective actions within cyberspace are central to talent, whereas for information professional (1820), oceanography (1800) and intelligence (1830) officers,

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technical system knowledge and the ability to communicate within the organization are key. For all designators, talent does not appear to correlate positively with rank.

Moreover, we articulate why some talented people choose to leave the Navy while others choose to stay in: The enjoyment of one's work is paramount, but we find nuanced differences between tribes here as well. For the former, who appear to enjoy their cyber jobs especially much, being able to specialize and continue in their cyber assignments seems likely to keep them in the Navy, whereas the requirement to generalize and rotate into less enjoyable jobs seems likely instead to push them into the civilian sector.

For the latter, the opportunity to either specialize or reach command seems key to keeping them in the Navy, whereas if unable to do either, they seem likely instead to leave for civilian jobs. Clearly, not everyone wants or expects to be the Chief of Naval Operations someday, and many talented people are willing to forgo potential command opportunities in exchange for stability in enjoyable jobs. Moreover, for all study participants, situated characteristics, such as motivational versus toxic leaders and quality of life issues, must balance with other motivating and dissatisfying factors.

Through further analysis, we identify four significant retention risks: (1) Rotation out of cyber and other enjoyable, specialized jobs; (2) generalization through job breadth; (3) dearth of command opportunities; and (4) repeated exposure to toxic leaders.

We then outline four recommendations for retaining IWC talent.

1. Propose an alternate career path for talented officers who do not seek command, one that would enable them to "homestead" in cyber and other jobs as specialists instead of generalists. This could potentially address the first two retention risks directly, and it could have an indirect effect on the third by reducing the amount of competition for the limited number of milestone and command billets.
2. Consider breaking some very large commands (e.g., Navy Information Operations Commands (NIOCs)) into smaller parts. This could accommodate more officers seeking command, and hence motivate a greater number of talented people to stay with their Navy careers.
3. Include command climate survey results and like indicators on leaders' fitness reports. This would put them on notice that subordinates' perceptions matter and can affect their own evaluations and promotion opportunities directly. It may also alert such officers to previously unrecognized issues with their leadership styles, and it could increase motivation to remedy toxic leadership from within.
4. Identify talented IWC personnel, and grant them limited access to more senior officers above their direct superiors. Although this would represent a break in part in the unitary command chain, such access could be limited to matters pertaining to leadership toxicity. This recommendation presumes, of course, that leadership toxicity is a local phenomenon and does not increase with rank. If this presumption is off target, then increasing access to more senior officers may exacerbate rather than rectify the problem.

Of course, much work would be required to implement recommendations along these lines, and it is unclear what impact they would have upon the detailing process, morale, perceived fairness, recruiting, chain of command, and other areas. Hence we leave the answers to such questions as topics for Navy IWC leaders to consider, but we offer to assist as appropriate through additional research and consultation along these lines. Nonetheless, these recommendations offer potential to help to keep more talented information warriors from leaving the Navy.

A very detailed NPS technical report titled "Understanding and Retaining Talent in the Information Warfare Community" (NPS-IS-17-002) is in press at the time of this writing, which will become available shortly through the [NPS, Defense Technical Information Center \(DTIC\)](#), and the Deputy CNO for Manpower, Personnel, Education & Training (OPNAV N1T). IWC members are encouraged to peruse this document and compare its findings, conclusions and recommendations with their own. As social scientists and authors, we welcome your thoughtful, constructive and informed comments and suggestions.

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