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Reflection Paper 3: Professional Development through Mentorship under Ryan Foster

I have been fortunate to work with Ryan Foster, our Civilian Technical Lead at the Naval Network Warfare Command (NNWC). Ryan is my Civilian Technical Lead and my mentor in my current role as a Cloud Engineer supporting the Endpoint Transport team. My previous reflection paper focused on his background and leadership style. This paper will focus on our working relationship and how his technical leadership, mentorship, and standards have helped me in my role as a Cloud Engineer for DoD cloud and cybersecurity projects.

I have worked under Ryan's guidance and direction in a highly classified environment at NNWC. He is never satisfied with an approximate answer or methodology, and he instills in others a need to function with the same level of precision and analysis when dealing with even normal technical issues. Ryan has shown me the impact one can have by being a professional, in a world of contractors, automation, and military personnel where professionalism is often sacrificed for the sake of expediency. He has demonstrated, through example, technical excellence in balance with a need for change and a formal way of doing things that set the standard that I strive for in my own work and in my mentoring of others. Mr. Foster has shown me that today, one's technical skills must always be in balance with an understanding of the importance of accountability, adequate documentation, and the readiness of a facility to accomplish its assigned mission.

Ryan functions as a senior advisor rather than a technical lead. He oversees technical aspects rather than day-to-day activities. His role involves a lot of hands-on work for cloud architecture and technical support. He troubleshoots complicated settings and brings business initiatives down to individual actions he can take to implement business goals. I spend a fair amount of time in his team for knowledge on on-going issues with networks, more in depth look at routing and knowledge on endpoint administration within Intune. We have weekly meetings that are preplanned project discussions and are later summarized to focus on methodology, resources and compliance with DoD regulations.

I have been working with the Endpoint Transport team for some time, and I often face challenges when trying to understand the flow of traffic between legacy systems on NMCI and Nautilus. Instead of giving me the answers, Ryan guided me through the process of isolating issues using Azure Monitor, PowerShell scripting, and network route tracing. This approach cultivated independent problem-solving and equipped me with the confidence to manage hybrid routing configurations autonomously. His mentorship transformed routine troubleshooting into an analytical process rooted in data correlation, trace validation, and cross-domain verification, skills that directly support Navy mission assurance.

Mr. Foster is also a mentor, he has taught me not only the how, but also the why of our tasks as we work to support the company's mission by integrating fundamental cloud management principles into our everyday work. He has encouraged our team to become more proactive in learning about new features in Azure and to experiment with different solutions that can be used within a secure environment and to document our findings to support our governance activities. This practice of researching and utilizing new Azure features and functionalities in a secure environment highly complement the practice of research and critical thinking emphasized in the classroom at Old Dominion University.

Working with Ryan has allowed me to gain proficiency in several key technical competencies such as automation of route validation through Azure CLI, the development of Intune compliance baselines to validate that all required groups, applications, and

extensions are present on endpoints for enforcement; and employment of Windows identity management to implement required security settings utilizing the Entra ID framework. He continuously reminds us that having working knowledge of these systems is just part of the complete set of skills we must acquire, and has impressed the importance of keeping detailed, up-to-date documentation to stay fully traceable of the configuration state of all endpoints, with documents being not only fully technical but also compliant with audit requirements.

Over time, my professional relationship with Ryan has evolved from observation-based participation to collaborative partnership. I used to have him validate changes required and to get his view before making changes to the network, or to understand problems on the routing tables. Now that I've gained more experience, I started doing my own analysis and have him review my work before final validation. A relationship developing in this way is a good sign of a mentoring relationship, the trust given by him gradually increases as it becomes clear that my ability and reliability are increasing.

Mr. Foster is very involved in the professional growth and development of the engineering staff. He has been encouraging me to study for a variety of Microsoft Certifications, such as the Microsoft Certified: Azure Administrator (AZ-104) and the Microsoft Certified: Azure Security Engineer (AZ-500) certifications, and he believes these certifications would be very valuable to DoD in general, and also to the Navy in particular,

given the Navy's planned shift to a more cloud-based platform. Mr. Foster has made the point that professional development is a broad concept that reaches far beyond our day to day work on individual projects, and that in order to maintain the mission readiness of the facilities and to ensure the ability of the Navy to adapt to emerging threats, engineers must continually develop their professional skills to ensure their work will remain relevant in the years ahead, and to ensure they are prepared for future opportunities.

One of his many qualities as a technical lead is that he shows us what it means to remain calm during critical situations, and the Endpoint Transport team is no exception to this rule. We deal with a substantial workload, both in terms of priority and visibility, while always maintaining the network during our Pre-Deployment Readiness periods. Mr. Foster approaches high-severity incidents with methodical analysis rather than urgency-driven reaction. This has made me more focused when dealing with unforeseen challenges. In addition to making sure everything works, Mr. Foster prioritizes clear communication. His technical briefings and directives are always written with the intent of bridging the knowledge gap between military personnel, civilian engineers, and contractors. I have learned a lot from watching him explain and describe in detail concepts such as Azure automation and encryption in enough detail to implement but with an appropriate level of depth to ensure that they are policy compliant.

In conclusion, Ryan Foster, our Technical Lead, has made a significant impact on my work as a Cloud Engineer for NNWC. Through his mentoring, I have learned first-hand the value of technical skills, standard processes and ongoing learning in production cloud environments. While my formal supervision is handled by AERMOR and project

management authorities, Ryan's technical leadership also serves as a complementary mentorship that bridges the knowledge gap between training and real-world experience. My whole perception of being a high-level national defense technologist has really changed due to him making me understand that it's a balance between being technical and being able to use technical skills in combination with great technical writing and communication skills.