



Force Multiplier: A Critical Reflection on Developing a Public Archaeology Veterans Program in Underwater Archaeology

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ABSTRACT

In 2018, East Carolina University's (ECU) Program in Maritime Studies, in partnership with the Florida Public Archaeology Network (FPAN) and veterans' nonprofit Task Force Dagger Special Forces Foundation (TFDF), developed and undertook an underwater archaeology veterans program on WWII-related submerged sites in Saipan, Commonwealth of the Northern Mariana Islands (CNMI). This program was called the Joint Recovery Team (JRT) and consisted of retired and medically retired Special Operations Forces (SOF) veterans from across the United States armed forces (i.e., Army, Navy, Marines, Air Force). The project included training 14 veterans in archaeological techniques and an intensive 2-week investigative field project, during which veterans assisted with archaeological target testing, site identification, and recording. A National Park Service (NPS) Maritime Heritage Program grant supported the training and the Department of Defense, Defense Prisoner of War/Missing in Action Accounting Agency (DPAA) financially supported the field project. Project leadership undertook training assessments including a program survey, field observations, unstructured interviews, and reflection journals. This article outlines the development of the public archaeology program, training, fieldwork, and assessments and provides a critical reflection of successes and areas for improvement.

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In 2018, East Carolina University's (ECU) Program in Maritime Studies, in partnership with the Florida Public Archaeology Network (FPAN) and veterans' nonprofit Task Force Dagger Special Forces Foundation (TFDF) developed and undertook an underwater archaeology veterans program on WWII-related submerged sites in Saipan, Commonwealth of the Northern Mariana Islands (CNMI). This program was called the Joint Recovery Team (JRT) and consisted of retired and medically retired Special Operations Forces (SOF) veterans from across the United States armed forces (i.e., Army, Navy, Marines, Air Force). The project included training 14 veterans in archaeological techniques and an intensive 2-week investigative field project, during which veterans assisted with archaeological target testing, site identification, and recording. A National Park Service (NPS) Maritime Heritage Program grant supported the training and the Department of Defense, Defense Prisoner of War/Missing in Action Accounting Agency (DPAA) financially supported the field project. Project leadership undertook training assessments including a program survey, field observations, unstructured interviews, and reflection journals. This article outlines the development of the public archaeology program, training, fieldwork, and assessments and provides a critical reflection of successes and areas for improvement.

VETERAN SKILLS AND ARCHAEOLOGICAL PROGRAMMING

Veterans possess a unique set of technical, or hard skills, and nontechnical, or soft skills, from their military training and service that transfer well into civilian life and the workforce. They are a group rich in expertise and interpersonal abilities, and for generations, have comprised a critical demographic for the US workforce (Davis & Minnis, 2017; Minnis & Kirchner, 2021). One of the most useful veteran-specific soft skills identified by researchers is leadership development (Rand Corporation, 2017), followed closely by critical thinking and decision-making capabilities that allow them to solve complex problems (Harper, 2022; Oprins et al., 2018; Simpson & Sariol, 2019). With a mission-focused commitment learned in the military, the experience gained by early adopters of new technologies, and a range of technical skills depending on their service position, veterans equal a force multiplier that is difficult to match. These soft and hard skills developed in the military can be put to great use in an archaeological field environment.

Archaeological projects incorporate veterans for the benefits the fieldwork provides them, including but not limited to recreation, rehabilitation, and job-skill acquisition.

The focus of such archaeological programs is often framed in how the program aids the veterans. Arguably, the relationship is very much reciprocal and symbiotic, and archaeology can greatly benefit from the inclusion of veterans. Archaeology, as a discipline, is often set in an environment that is challenging in many ways, including isolated locations, weather-dependent and weather-impacted projects, intensely physical jobs (i.e., digging, lifting), and often time-sensitive turnarounds and inflexible deadlines. Projects become more complicated when you add the element of doing archaeology underwater, which requires self-contained underwater breathing apparatus (SCUBA), a buddy system to ensure diver safety, and even more time limitations. As such, the soft and hard skills that veterans acquire in service are perfectly suited for archaeological fieldwork.

The first program in the US to incorporate veterans in archaeology was a lab-based program called the Veterans Curation Program (VCP), which began in 2009 under the US Army Corps of Engineers Mandatory Center of Expertise for Curation and Management of Archaeological Collections. It is a 6-month, paid training and work program that provides veterans with skills for working in archaeological and historical collection labs (Arendt, 2013). Archaeology field programs for veterans began in earnest in the United Kingdom (UK) just over 10 years ago in 2011 with Operation Nightingale (Ministry of Defence, 2019). Since then, several UK programs and organizations have reported on their activities that range from public archaeology to therapeutic outcomes (Bennett, 2022; Dobat & Oruc, 2019; Evans et al., 2019; Everill et al., 2020; Finnegan, 2016; Nimenko & Simpson, 2013; Osgood & Andrews, 2015; Ulke, 2022; Walshe et al., 2012). This field programming jumped across the pond to the US when, all at the same time in 2018, the JRT conducted its first field project in Saipan, American Veterans Archaeological Recovery (AVAR) partnered with the American Battlefield Trust to work at Saratoga National Historic Park, and Paralyzed Veterans of America (PVA) and Wounded American Veterans Experience Scuba (WAVES) partnered with the National Park Service's Submerged Resources Center to conduct research at Pearl Harbor National Memorial (Hanks et al., 2021; Waters-Barham & Humpherys, 2022). Again, the goals of each organization, partnership, and project range in scope, from recreation to rehabilitation to public archaeology, all of which have an important role to play in the relationship between veterans and archaeology. The program we discuss here is, first and foremost, a public archaeology endeavour, but due to the partnership with a veteran organization that focusses on rehabilitative programming, there is an element of physical and mental wellbeing considerations to discuss.

VETERAN ISSUES AND PROGRAM DEVELOPMENT

US military veterans often face significant mental health and physical health issues. In 2017, more than 1.7 million Veterans received treatment in a VA mental health program, a number that has risen each year from about 900,000 in 2006 (U.S. Department of Veteran Affairs, 2018). Posttraumatic stress disorder (PTSD), depression, and anxiety disorders are mental health conditions impacting veterans exposed to traumatic events. Veterans also face physical injuries from service and combat such as traumatic brain injury, amputations, and chronic multisymptom illness. These mental and physical health issues impact veterans' transition and reintegration to civilian life once they are medically retired. Myriad programs in rehabilitative therapy to help veterans recover and reintegrate exist, including but not limited to horseback riding, SCUBA, surfing, sports, archery, and hunting. SCUBA rehabilitative therapy shows promise in reducing stress, symptoms of PTSD, and depression, and in improving wellbeing (Morgan et al., 2018). Veterans who participate in SCUBA programs benefit from increased focus, the feeling of weightlessness, which removes stress and pain of physical disabilities, and comradery, which enhances social experiences and improves self-concept (Carin-Levy & Jones, 2007). Much like surfing, the high-intensity sport of SCUBA provides veterans the opportunity to engage in risk-seeking behaviours in a healthy environment (Rogers et al., 2014). When SCUBA is combined with some type of occupational therapy intervention, such as mindfulness and breathing exercises, symptoms of anxiety are dramatically reduced (Krpalek et al., 2020). Veterans in the Krpalek et al. (2020) study "noted that they naturally apply deep breathing while SCUBA diving, and that intentionally extending this to daily life helped them self-regulate when outside of the water" (p. 103) Further, Krpalek et al. suggested their findings add to a growing body of literature that indicates the need to develop regular and long-term participation in occupation-based interventions, such as SCUBA diving, for veterans experiencing mental-health challenges.

ECU's Program in Maritime Studies faculty and the nonprofit veterans' organization TFDF conceived of and created the JRT in 2017. TFDF assists wounded, ill, or injured US Special Operations Command (SOCOM) members and their families. They respond to urgent needs, conduct Rehabilitative Adaptive Events (RAE), and provide health solutions for service members. As part of their RAE programming, they hold an annual veteran SCUBA diving event called Dagger Dive in the Florida Keys for veterans and veteran families. This event allows veterans and their families to learn to SCUBA dive, which in turn brings families closer together and allows for veteran fellowship.

ECU is an academic program with faculty whose research focuses on battlefield and conflict archaeology, more specifically WWII in the Pacific and Saipan. In 2017, ECU and TFDF began discussing the possibility of offering veterans training and rehabilitative adaptive events in underwater archaeology on WWII sites related to the Battle for Saipan (June/July 1944) in the western Pacific. ECU and TFDF then partnered with FPAN to apply for an NPS Maritime Heritage Program grant to support the development of underwater archaeology training for veterans and the first iteration of the program in Saipan. At the same time as ECU was developing a relationship with TFDF, ECU began discussions with and signed a Memorandum of Agreement (MOA) with DPAA to assist with their mission to search for and recover lost service members. When this occurred, ECU brought TFDF into discussions regarding potential missions, initiating the creation of what became the JRT, which consists of veterans who undertake training in underwater archaeology and participate in DPAA missions as part of rehabilitative adaptive events (Figure 1). The connection with DPAA missions became critically important because it provided veterans with a real-world mission that has a high return on investment for both the veterans and the lost service members' families. TFDF leadership chose the name Joint Recovery Team (JRT) and described it as "joint recovery" because it involves: (a) joint SOF members (Army, Navy, Air Force, and Marines), who are (b) recovering their sense of self and gaining tools to transition to civilian life, while (c) on a mission to recover remains of lost service personnel (David et al., 2020). TFDF implemented JRT as a rehabilitative adaptive event; however, for the archaeologists it has provided another avenue for public archaeology and expanding participation in the field to a different and uniquely skilled stakeholder.

TRAINING

As the JRT was coming together, thoughts turned to the need for training to teach the veterans what to do in the field so they could perform as skilled and useful archaeological assistants. Rather than reinvent the wheel, ECU reached out to FPAN, which had developed and was actively teaching an underwater archaeology methods course for sport divers. With a little tweaking, FPAN's Submerged Sites Education & Archaeological Stewardship, or SSEAS, course worked ideally to address the needs of the project, the archaeologists, and the veteran divers.

FPAN developed SSEAS as part of its workshop suite to address requests from sport divers who wanted to learn more about underwater archaeology and, especially, to be able to participate as volunteers on underwater archaeological projects. FPAN's goal with SSEAS is to



Figure 1 Joint Recovery Team 2018 in Saipan, Commonwealth of the Northern Mariana Islands.

empower sport divers to become citizen-scientists armed with the tools, both theoretical and practical, to further research agendas, collect useful data, and serve as a voice for ocean science (Scott-Ireton, 2014). FPAN organizes the workshop into classroom, confined water, and open water portions, generally over 3–4 days with evening classes and a weekend of diving. Class discussion begins with presentations on the purpose of archaeological inquiry and differences between “treasure hunting” and science, to combat misinformation often presented in popular media. Additional topics include archaeological field methods, dating techniques based on material culture, historic ship construction, and laws affecting submerged heritage sites. A dryland practice session enables participants to learn simple baseline offset recording and to rehearse communicating measurements with hand signals. Participants repeat this session in controlled confined water (i.e., a swimming pool) before skills are practiced once again in open water, usually the site of one of Florida’s underwater archaeological preserves. Upon completion of the course, SSEAS divers can serve as volunteers on projects, can inspect sites marked as obstructions on nautical charts to determine age and possible significance, and can take on-site monitoring responsibilities as requested. FPAN offers SSEAS as a specialty course through Scuba Diving International (SDI) training agency; the Nautical Archaeology Society (NAS) as part of its training scheme also recognizes SSEAS.

Using the SSEAS framework, FPAN and ECU archaeologists modified the presentations and practice sessions to meet the needs of the Saipan project; WWII aircraft structure

replaced ship construction, and procedures for conducting circle-searches to identify magnetic anomalies replaced baseline offset recording and feature drawing. Discussions about archaeological goals and ethics remained the same since, like most members of the public, the TFDf veterans knew about underwater archaeology primarily through what they had seen on television or read on the internet. As is typical with SSEAS classes, the presentation on laws engendered many questions, as divers often do not realize that state and federal laws protect submerged heritage, and in the case of Saipan, commonwealth law and regulation protect underwater sites, just as cultural sites are protected on land.

A local dive shop on Saipan, Green Flash Dive Services, provided classroom space and their training pool (Figure 2). Trainers condensed the classroom portion and land-based training into one day due to limited field time in Saipan. Project leaders delivered the lectures in the morning with time for questions and discussion. The afternoon provided time for the veterans to practice circle searches in the dive shop yard while above water, as well as to rehearse communicating with their dive buddy through hand signals to fill out the circle search proformas. Once comfortable with the process, the veterans took to the pool to practice their new skills underwater. The following day, project work commenced with on-the-job training, as veterans searched for and identified underwater side scan sonar and magnetometer targets. The calm, clear water of the Saipan lagoon provided an ideal environment for honing skills and streamlining the process.



Figure 2 Veteran pool training with divers preparing to enter the pool.

This partnership also sought to support veteran identities; as such, an ECU colleague with a focus on identity research participated in the team. Adams et al. (2019) reported that in over 20 years of study into veterans' post-deployment physical and mental wellbeing, very little attention "has been paid to psychosocial factors related to veteran identity as a protective factor for veteran well-being" (p. 305). Adams et al. found that a positive veteran identity reduced suicidal thoughts for participants in their study. Similarly, Flack and Kite (2021) found that a focus on identity, especially when there is a sense of social connectedness, may improve mental health outcomes and well-being of veterans. As such, the identity expert developed a plan for assessing the full program from training to fieldwork. This feedback loop has been critical to collecting baseline data and improving the program over the last several years.

JOINT RECOVERY TEAM: MISSION SAIPAN

The first JRT project was held in summer 2018 in Saipan and was part of a larger summer-long, ECU-DPAA mission focused on identifying previously surveyed magnetometer and side scan sonar targets in search of WWII aircraft losses. After the veterans completed SSEAS training, the project began a non-disturbance archaeological



Figure 3 Archaeologically-trained veteran divers preparing for circle-searches.

investigation and recording of anomaly targets (Figure 3). This included having veterans dive on magnetometer and side scan sonar targets in dive-buddy teams. Their dive consisted of a visual inspection and, if deemed necessary, a metal detector circle search to identify the anomaly. When identified, veterans photographed targets and completed a recording form underwater. Unsurprisingly, many of the veterans had used similar search and rescue techniques and equipment as part of their military training and service, and they took to the task very well (Figure 4).

Three boats included crews of veterans and archaeologists who tested several targets per boat each day. Upon return to the hotel, the team participated in a nightly briefing to discuss the activities of the day, any significant finds, and plans for the following day. After the briefing, groups of the crew would head out for dinner and return to the hotel to process data and prepare for the next day. This schedule continued for 2-weeks. Weather delays due to a tropical storm provided the opportunity to take the veterans on a tour of historical sites on the island.

Archaeologists made considerations related to veterans' abilities and needs and having a close partner veteran organization to help identify those needs in the early stages of planning was critical to the success of the program. For example, some veterans required hotel room accommodations that were ADA (Americans with Disabilities Act) compliant. Additionally, archaeologists considered survey vessels, diving platforms, and entry/exit strategies for veterans with injuries and illnesses. Leadership carefully chose dive-buddy teams to ensure diving abilities matched or were complimentary, as well



Figure 4 Archaeologically-trained veteran diver conducting metal detector survey.

as consideration for pairing like forces with like forces (i.e., Army with Army, Navy with Navy) to foster comradery.

ECU and TDFD leadership had regular meetings to discuss issues that might arise or need addressing. In addition to the 14 veterans, there were several university faculty, staff, and graduate students from ECU and FPAN as part of the support and scientific team. The cultural difference between university and military created learning opportunities for all team members. For example, what was standard language and joking in the military community was at times uncomfortable for university members who adhere to specific codes of conduct and Title IX. This provided an opportunity for a conversation about the comradery and brotherhood of the military and differences in socialization in academia. This conversation was fruitful and positive, largely due to the open communication leadership had with each other and with their respective teams. Despite some differences, team members found that their “cultures” were more similar than dissimilar, and archaeologists and veterans made great bonds and friendships that have lasted beyond the fieldwork. Similarities between groups included mission-focused attitudes, adherence to strict schedules and extensive planning, and strong work ethics.

The DPAA mission was a great success with a total of 156 targets searched via SCUBA and snorkel. A total of 6,714 square meters of seabed was searched with a cumulative dive total of 220 dives at 130 hours underwater. The target testing identified an aircraft loss that became the target of investigation for a potential DPAA recovery.

Upon return home, and at the request of participants, the group created an online sharing platform using Slack where archaeologists and veterans shared historical and archival research through chat groups and continued communication. The entire team remained in contact with each other through social media and other forms of communication, and several veterans continued with valuable historical research into the MIA cases. Some veterans have been repeat participants in subsequent missions and continue to be active divers in their personal lives.

STUDY OVERVIEW AND METHODOLOGY

This study was an evaluation of the archaeological training program involving medically retired veterans. The qualitative researcher (coauthor Ticknor) kept detailed fieldnotes throughout the program, conducted unstructured interviews with each participant, and administered a written survey on the last day of the program. On the first programming day, leadership informed the participants about the study, and participants signed consent forms.

PARTICIPANTS

The study included 14 veteran participants. Ages of participants at the time of the study included 25–34 ($n = 2$), 35–44 ($n = 2$), 45–54 ($n = 8$), 55–64 ($n = 1$), and 65–74 ($n = 1$). Thirteen participants identified as white, 1 identified as Black or African American, and all participants identified as men.

Time of service included 5–10 years ($n = 1$), 11–15 years ($n = 3$), 16–20 years ($n = 1$), and 20-plus years ($n = 9$). All participants were medically retired veterans who had served in Special Operations for the Air Force, Army, Marines, or Navy.

Five ECU and FPAN participants also consented to the study. Their ages at the time of the study ranged from 35–44 ($n = 3$), 25–34 ($n = 1$), and 45–54 ($n = 1$). All participants identified as white with 3 participants identifying as women and 2 as men.

DATA SOURCES

There were three primary data sources: end of program survey, unstructured interviews, and fieldnotes. Ticknor conducted interviews and recorded fieldnotes, and McKinnon and Scott-Ireton collaboratively designed the survey based on the goals of the program.

SURVEY

The focus of the survey was twofold: (a) to learn participant perceptions of the SSEAS training portion of the program, and (b) to learn participant perceptions of the archaeological fieldwork programming. Each section included 7 open-ended questions; the entire survey is in the Appendix. Results of the open-ended questions were thematically organized, then grouped into categories for reporting purposes. Researchers determined converting responses into categories would provide the most anonymity.

Researchers were interested in participant perceptions of these training components to add validity to the veteran programming available and to extend training options to include military expertise. Since all participants served in SOF before retirement, they had extensive expertise in military operations, were highly trained, possessed a set of specialized skills and abilities, and were complex problem-solvers.

ECU and FPAN participants took the same survey for further reflection into the training program. The team used these results to provide perspective about the program from the perception of the trainers.

FIELD OBSERVATIONS AND NOTES

Ticknor collected daily field observations and notes and used these to inform interview topics, to check with participants about initial themes, and to develop follow-up questions during the program. Ticknor took fieldnotes during land-training sessions, daily debriefings, group gatherings or meals, and after interviews, yielding several entries per day. Ticknor did not take fieldnotes on the boats; however, boat events reported during debriefings were recorded in the fieldnotes.

INTERVIEWS

Interviews occurred throughout the program with each participant and were informal, often happening during commutes, meals, or other casual settings, and were based on program goals with a focus on veteran identities. Interviews varied in length (15 to 30 minutes), and Ticknor interviewed some participants more than once because of access. For instance, Ticknor interviewed two participants who did not go out on the boats several times. As the program continued and rapport increased, interviews became more conversational and participant directed. Several participants sought out Ticknor to share their perspectives and to provide follow-up information to previous interviews or events.

Researchers triangulated all data sources, which are reported in the Appendix. Examples of findings are shared below.

RESULTS

Overall, results were positive about the program goals. Participants overwhelming noted that the program provided opportunities to utilize their skills, develop new skills, and fostered a sense of community. Highlighted below are three findings related to these results.

Veteran participants and the ECU and FPAN trainers noted training and programming-related findings. Veteran participants indicated that the training either met or exceeded their expectations in terms of learning and preparing them for the archaeological dives. Veterans often referenced similar sentiments during the daily debriefings and in interviews. Veterans also offered suggestions for training modifications and deeper insights into participant considerations. For instance, in response to Part 4. Archaeological Fieldwork Programming, Question 2: “Was the length and pace of fieldwork acceptable?”, one participant wrote, “Considerations: the different challenges

each participant may have; time participants are able to be deployed.” This statement represents the differing needs—both physical and mental—unique to each veteran and the time they spent in the water and on the boats, as well as time off from diving. Several participants echoed this sentiment in their interviews and in the daily debriefings. As discussed later in the section Critical Reflections, this was a consideration the researchers had not fully anticipated in planning.

ECU and FPAN trainer survey responses also indicated positive perceptions of the training with specific references to collaboration with veterans. Many of these participant responses indicated a desire to work with the TDF personnel again and that the veteran participants “exceeded” their expectations in both their skills and enthusiasm. Trainer-participants also noted that veterans persevered each day and continued to apply their training and new knowledge in the field. One participant wrote that veterans were able to, “put their personal experiences in(to) practice,” which aided in the archaeological fieldwork. Trainers reiterated this statement in the daily debriefings as well.

Finally, data evidenced findings related to identity, however, these will be only cursorily discussed in this paper, as the focus is on the development of the programming rather than veteran identity. Findings from this study echoed many of the findings from SCUBA rehabilitative therapy programs, in terms of reduction of stress and depression, and in improved well-being (Morgan et al., 2017). As with findings from Carin-Levy and Jones (2007), participants pointed to the sense of comradery during the programming. Central to identity in this study, veterans noted how the program provided a renewed sense of mission, purpose, and community. In several interviews, participants noted that they missed the bond they had created and maintained while serving. Participants repeatedly referenced “feeling like a team again” and “being with people who understood” as benefits of this program and experience. Additional analysis of identity-related data is underway and may be published in the future.

CRITICAL REFLECTIONS

PI PERSPECTIVE

From the perspective of the principal investigator (PI) and archaeologist running a project, three major objectives needed fulfilling: (a) the scientific/research goals, (b) funders’ needs and requirements, and (c) permitting and legal requirements of the project. There are many considerations for creating a successful project, but ultimately the three needs outlined above are the top priorities, as both the scientific process and contractual and legal obligations drive these issues. However,

archaeologists committed to community engagement and public archaeology must balance those requirements with equally important and valid goals and needs that create a meaningful archaeological experience for community participants. This seemingly binary opposition setup for the archaeologist must be negotiated and balanced prior to and throughout a project, sometimes daily, when trying to accommodate all needs and requirements. For this project, graduate-students-in-training were involved, which added another layer of complexity, and so pedagogical practices are also part of the goals and needs for the academic PI. As such, there are many layers of responsibilities and requirements an archaeologist must balance to run a project that involves community members.

Assembling a team is critical to the success of a project. Colleagues such as public archaeologists, experienced trainers, and survey specialists can greatly contribute to, in the first case, engaging with the community participants and, in the second, gathering data about the project and participant experiences for feedback and development purposes. The team might include other specialists to fulfil areas of need or for additional support. For example, TFDF has trained medics and dive instructors on staff; however, if this were not the case, specialists in those areas would be useful. Additionally, TFDF leadership have the experience and knowledge of understanding veteran medical and mental health needs as well as a full board of medical and mental health specialists they can call on for support. This can alleviate some of the ethical requirements and emotional work of the PI and archaeological staff. This internal organizational knowledge and support system was crucial to creating a veteran-friendly project and the PI called upon these members regularly during planning and decision making.

In addition to putting together the right team, PIs should outline the requirements of all participants' perspectives in advance of a project to allow all team members to understand the balance of needs and considerations that go into decision making. For this project, the PI communicated the three primary archaeological needs and requirements through discussions with the leadership team of TFDF and through the training process. TFDF's participant needs and requirements were also sought and received by the PI. Upon reflection, in future projects it would be more beneficial to engage all participants, not just leadership, in the details of archaeological and community participant requisites. For example, the PI could create a document involving all team members with discussion around each requirement and need recorded in that document. This would be helpful in communicating the balance that a team should achieve on a public archaeology project. Outlining these requirements provides each participant the opportunity

to identify their needs and set their expectations for the project based on others' needs. Furthermore, it may allow participants to engage in more input and reflection on how the PI designs and operates the project and the decision-making that takes place. While leadership achieved true partnership, partnership at the individual level is an area for improvement.

One of the major critical reflections of the project, from the PI's perspective, was the lack of knowledge regarding veterans and veteran issues. The PI is a civilian and, while she has family who served in the military, she knew very little about veteran experiences and issues beyond having participated in ECU's GreenZone training to familiarize university faculty, staff, and students with veteran and military issues. Nevertheless, in large part, she relied heavily on the partnership with TFDF. In hindsight, while the PI and entire university team participated in the GreenZone training, they could have read more about veteran programming and rehabilitative therapy programs, so they could recognize and identify issues in addition to those TFDF brought to our attention. For example, the PI assigned a veteran with experience in using metal detectors to conduct detection survey onsite, similarly to how one might assign a student with prior experience to a specific task to achieve good results. The mistake was in failing to consider that the veteran had been involved in a significant and life-altering event related to an Improvised Explosive Device (IED) while in service. That experience activated some discomfort when they were conducting the metal detection survey. As a SOF operator, the veteran was less likely to communicate their discomfort and more likely to just undertake the task at hand (i.e., fulfil the mission). As such, another veteran communicated the issue to the PI, and at that point, the veteran was reassigned to different tasks. Understanding and knowing more about the injuries and illnesses veterans face, as well as the drive and commitment of SOF operators and how to manage that from a logistical standpoint, would have been beneficial to all.

Finally, a discussion of needs, requirements, and expectations could also identify what participants want to take away from the project, and perhaps increase their prospects for continued engagement in the project or archaeology in general. As part of this project, the PI did not consider that the veterans who participated might want to further engage in historical research upon completion of the project. The focus was on completing the project successfully, which did not allow time to consider that it might pique participants' interest in carrying forward. As such, and very much in hindsight, the PI created a Slack channel to share research and further discussion. Several veterans continued to research specific archaeological elements and shared those with the group

and the PI via Slack and email. One veteran went on to earn more certifications in diving and has now become a dive instructor. Another veteran was so moved by the experience that he had a photograph from the project tattooed on his upper thigh. Finally, several of the veterans have now participated in other archaeological projects through their connections with this project. The PI could have considered more opportunities to create after-project opportunities to engage the veterans.

IDENTITY AND SURVEY PERSPECTIVE

From the perspective of a researcher focused on identity, Ticknor learned several lessons that may provide guidance to future researchers working in similar contexts. Four lessons and reflections about the experience are presented here.

The first lesson was about being more prepared for the emotional toll on the researcher. As stated earlier, Ticknor conducted all interviews and recorded field observational notes. Ticknor thought she was prepared for topics of mental well-being and discussions of physical health in the interviews and in the daily debriefings. As a trained qualitative researcher with nearly 2 decades of experience researching identity negotiation using interviews, she was well-versed with the process and the expectation of topics that would be challenging, emotional, and uncomfortable. What she had not prepared for was her own emotional needs when not having the usual outlets, as in other research projects. In all other research contexts, she was an interested observer and listener in a temporary space during the interviews and in the field. In this context, she was without an opportunity for other relationships due to the island location away from home.

Related to this first lesson, and perhaps a sub-lesson to this, was that she was not prepared for the isolation she experienced without non-research relationships or social interactions. Due to a change in dive participation and vehicle rentals, she became a driver and companion for two non-diving veterans. When the rest of the team was out on the boats, she was without down time from the project or participants. To compound this constant “on,” as rapport increased with participants, they often sought her out to talk and share their experiences. She knew this was possible due to her experiences as a qualitative researcher and her intent to become a trusted listener and interested member of the team. What she was unprepared for was the lack of time to decompress and renew her own well-being.

A third lesson learned from a research design perspective was that the participants were more mentally and physically exhausted than project leaders had expected. Originally, leaders planned for veteran participants to keep a daily record of events and reflections of the program; however, the team found out quickly that this expectation was unrealistic and needed abandoning. Our misconception was

that the participants would not be physically or mentally tired after long days in the water. In retrospect, we should have had a conversation during the first few days about how the process could occur, or have had modifications in place to capture this data in another way. We compromised by holding more interviews than initially planned, which added to the first lesson learned regarding the need for researcher support and well-being. If we were to conduct this program again, we would reassess our research design to collect more data orally by more researchers and over a longer period. This would require a research design with more interviewers and a data plan with a shorter written survey, and an extended post-program period for reflection about the program learning. Our intent would be to lessen fatigue, which may produce more completed surveys.

The final lesson learned from the researcher perspective is that we had not done the identity work ourselves before this project. The non-veteran team members each had cursory knowledge about family member and friend military service, as Ticknor stated above, however, we were not prepared for the depth or scope of our lack of intimate knowledge, and biases or misconceptions. If we were to enter in another partnership like this, we would spend time before the program assessing needs, conducting trainings, reading about and talking to veterans, etc., to gain more tools and understanding about our collaborators. As already mentioned, we misjudged the activities we had planned, and we were not emotionally prepared for their stories and experiences. This feeling of emotional unpreparedness also translated to working with the graduate students who were members of the team. For instance, when a graduate student overheard difficult and emotional conversations among the veterans, Ticknor was not prepared to feel so protective of these team members' emotional needs, nor did she have skills, or energy, to support them.

TRAINER PERSPECTIVE

From a training perspective, the TDF veterans proved to be a unique group of divers. Like many groups, some were new to diving, while others held advanced certifications and a couple were diving instructors used to being on the teaching side. Unlike most sport divers, however, the TDF group are all combat veterans, highly trained and possessing a set of specialized skills and abilities. They are accustomed to receiving training and then using that training to complete tasks, generally without much direct oversight. Their expectations of training instruction are high and they are critical of any program that simply tells them how without explaining the why. Experienced and proficient problem-solvers, they look for ways to simplify and expedite processes to achieve the ultimate objective. They learn quickly, and then work quickly, always aiming to complete the current task to advance to the next task. These are all admirable and

desirable qualities, particularly in the fraught and dangerous climate of warfare, selected for and augmented in our military's Special Forces. Archaeology, however, is generally slower, more methodical, and methodological, with precise and controlled processes that meet the requirements of science, grants, research, law enforcement, legal evidence, chains of custody, and peer review. The archaeologists and veterans did not clash over field techniques, per se, but the evening meetings often included discussions about the need to proceed carefully and thoroughly, and why archaeologists conduct field operations in certain ways.

After the conclusion of the project, the archaeological and training staff reflected on ways to make future projects in partnership with TDF more efficient, especially if presented with an entirely new group of veteran divers. For example, while the SSEAS-based training met the needs of instruction and skills development, the one-day class seemed a large dump of information. Trainers should spread future trainings over 2- days, at the least, perhaps even via online webinar before the group deploys to the field. A more relaxed schedule would give time for internalizing information, incorporating more questions and discussion, and providing detailed explanation. Further, veterans could dedicate training day(s) onsite to perfecting in-water skills, practicing new tasks, and learning the intricacies of recording forms and paperwork.

CONCLUSION

From a public archaeology perspective, the JRT project fulfilled the aims of engagement of nonprofessional archaeologists in the archaeological process and mission. The TDF veterans were enthusiastic about the SSEAS training and, as described above, many continued to engage with the project after conclusion of field work, providing valuable assistance with research and crucial insight for future training and involvement. Since the 2018 project, additional partnership with TDF has provided avenues for the veterans to hone their archaeological skills through additional training in archaeological theory, excavation methodology, remote sensing technologies, ship and aircraft construction, and conservation of waterlogged materials. Several of the veterans are pursuing more formal education in maritime archaeology at ECU and other institutions, and many TDF members have participated in archaeological recovery projects with other archaeology partners. These outcomes are the pinnacle of achievement for public archaeology programming, ultimately turning citizens into citizen-scientists and even professional colleagues.

Additionally, veterans acted as a force multiplier in conducting archaeological fieldwork and in the success of the research and project. Their soft and hard skills were truly

unmatched with regards to working with avocational or public groups, and even graduate student field schools. The technical skills they brought included small engine repair, metal detection specialization, rope and knot work, advance diving, medical knowledge, search and recovery expertise, war materiel identification, and boat operations, among many other abilities. However, soft skills were probably the most conducive to a successful mission. Having a team that was mission-focused, adaptable, task-oriented, time-sensitive, and leadership-focused with a strong work ethic created the penultimate experience for both the veterans and the archaeological crew. Archaeologists' expectations were exceeded greatly in both the ease with which tasks were accomplished and the amount of work conducted.

ADDITIONAL FILE

The additional file for this article can be found as follows:

- **Appendix.** Post-program survey. DOI: <https://doi.org/10.21061/jvs.v9i3.457.s1>

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COMPETING INTERESTS

The authors have no competing interests to declare.

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