CENTER FOR ARMY LESSONS LEARNED

SPECIAL STUDY

UNITED STATES MILITARY ACADEMY, WEST POINT



COVID-19 RESPONSE AFTER ACTION REPORT



United States Military Academy, West Point

COVID-19 Response After Action Report

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West Point Superintendent Foreword

Thank you for reading this report on how the United States Military Academy (USMA) executed its mission during the COVID-19 pandemic. I hope you will find it useful in navigating these uncertain times.

The mission of USMA is "to educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of duty, honor, country and prepared for a career of professional excellence and service to the nation as an officer in the United States Army." As West Point approached this challenge, we constantly balanced the risk to the force with the risk to the mission of developing leaders of character. My top priority was always the health and safety of the entire West Point community. Our immediate and proactive efforts and decisions were required to mitigate the effects and to limit the spread of COVID-19.

Throughout the pandemic, we balanced public health with the enduring requirement to support Army readiness by providing one thousand new officers to the force. In order to do so, we had to graduate and commission the class of 2020, and then continue training for the three under classes, while preparing to receive the new class of 2024.

Due to COVID-19, we had to adapt our normal training cycle, and will continue to do so as the threat evolves. However, our goal continues to be minimized disruption to our cadets' developmental experience, so that we may best prepare them for service to the nation. We received full support from, and remain nested with, Army senior leadership and staff. This report is one effort to share best practices throughout the force in support of Army readiness.

The entire USMA team, and our mutual aid partners, continue daily efforts to protect the community while accomplishing our mission. One of the hallmarks of West Point is our strength and resiliency. No matter the circumstance, we will continue to develop leaders of character for the United States Army.

Go Army!

Darryl A. Williams

60th Superintendent

Unite States Military Academy

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CENTER FOR ARMY LESSONS LEARNED INTRODUCTION

In May 2020, four weeks before the graduation of the U.S. Military Academy (USMA) class of 2020, Lieutenant General Darryl Williams, Superintendent of USMA, requested assistance from the Center for Army Lessons Learned (CALL) to support the development of a West Point COVID-19 response after action report. The scale and scope of the collection was confined to three Army Chief of Staff focus areas, and one additional USMA Superintendent topic. Those four collection topics are planning; reception, staging, onward movement, and integration (RSOI); graduation; and medical capacity. CALL identified a two-man collection and analysis team (CAAT) which conducted virtual coordination with the USMA G-5 prior to arriving at West Point. On 24 May, the CAAT traveled to West Point and started the collection the following day. Over the course of six days, the CAAT conducted interviews with USMA leaders and staff, the Academic Dean and faculty, the U.S. Corps of Cadets (USCC) Commandant and staff, the Office of the Directorate for Intercollegiate Athletics (ODIA), the U.S. Army Garrison West Point, and the Keller Army Community Hospital (KACH). Additionally, the CAAT directly observed the RSOI process at Camp Buckner and the West Point main campus, and visited the aerial port of debarkation (APOD) reception and staging center at Newark International Airport. The CAAT utilized the collection plan developed by the USMA G-5 to conduct interviews and collect direct observations from those that conducted the planning and were leading the RSOI process. On-site collections concluded on 1 June, with the CALL team returning to Fort Leavenworth, Kansas, the following day. This report could not have been possible without the candid and transparent feedback provided by USMA's leaders and staff. The collection team is deeply indebted to their kind cooperation, professionalism, and superb hospitality.

EXECUTIVE SUMMARY

Like many other learning institutions, the U.S. Military Academy (USMA), located in West Point, New York, was impacted by the coronavirus pandemic that affected the entire world in the spring of 2020. The USMA staff quickly initiated planning to develop a response to COVID-19. Planning resulted in a campaign plan that focused on four major key tasks: return and reception of the graduating class of 2020, the graduation of the class of 2020, subsequent Cadet summer training, and activities surrounding the reception of the new Plebe class in late summer. All planning needed to balance the immediate impact of health as a risk to force, and the risk to mission of developing leaders of character.

Although USMA does not have organic planning staff akin to a corps-level headquarters, USMA built a highly capable crisis action planning team, which utilized the doctrinal military decision-making process (MDMP) to develop an operation order, and supporting plans and fragmentary orders (FRAGORDs). On 26 May 2020, the first returning cohort from the class of 2020 was processed through a well-planned, thoroughly rehearsed, and superbly executed reception, staging, onward movement, and integration (RSOI). Over the following four days, the remainder of the class of 2020 returned to the Academy and were reintegrated onto the campus using the same process.

This process will continue to be suitable for the remaining Cadet population as they return to West Point to continue their 47-month experience. This report details four major focus points as directed by the Army Chief of Staff and the Superintendent of West Point. Those are planning, the RSOI process, the graduation, and the medical capability and capacity. The West Point COVID-19 response was made possible by the determination, professionalism, and warrior spirit of the staff and faculty. Egos were checked at the front door of the planning spaces, and a can-do attitude was on display throughout planning and into the execution of RSOI and the completion of the graduation. There were many lessons learned and best practices identified throughout the three months in which OPERATION RESILIENT KNIGHT was developed and then transitioned into execution. Below are the key points identified during the Center for Army Lessons Learned collection, which was conducted on the Academy grounds. There are many points upon which to grow and improve. Additionally, many of these points may serve as waypoints for other educational institutions and training commands to imitate as they also chart a path to return to training amid the coronavirus threat.

Key Points

Over communicate and over coordinate. Understand the strategic communications environment and address the situation with facts and confidence. Put the senior leader in front of the media and smartly communicate command messaging to influence each target audience. This enabled the ability to protect the West Point "brand," and improve the reputation of the Army writ large. In so doing, the Academy cast a wide net for expertise to coordinate with other Federal, state, county, and local government agencies and health care entities.

Operationalize the planning process. USMA treated the COVID-19 health threat like a named Army operation and mission. This necessitated an all hands approach to planning and execution. This involved the methodic application and deliberate employment of the doctrinal MDMP.

Build a cross-functional team using resident expertise to build a solid plan. This situation was akin to the 100-year flood. It does not happen often, but when it does it stresses the system in unimaginable ways. USMA brought their best planners and academic experts to identify the true nature of the public health threat and then identified a campaign plan to address it.

Distribute mission command and command and control. The USMA migrated to the .edu domain over a year ago, and while doing that, it also migrated to the Microsoft (MS) Teams collaboration tool. As a result, Academy staff and faculty were quite familiar with MS Teams when the health crisis hit. Additionally, MS Teams enabled distributed planning and the ability to brief leadership remotely—sometimes by cell phone application. USMA was not caught flat-footed on how to best migrate to online/distance learning. MS Teams, alongside other academic software (Google Classroom and Blackboard), enabled a three-day shift from resident classroom instruction to remote online/distance learning while still maintaining academic standards. The importance of MS Teams cannot be overemphasized.

Create decision space. Initial planning efforts focused too narrowly on identifying options for how to address Cadet learning in a COVID-19 environment—do the Cadets return to the Academy after spring break or not? This was not what the senior leadership needed. Assuming the epidemic was going to interrupt the Academy schedule for the foreseeable future, the institution needed a clear campaign plan tied to known points; one that took a long view. There are academic, military, physical, and character development requirements that are known points on a calendar. They are programmed events every year that only adjust slightly. The planning team developed a campaign plan that accounted for these known points and then determined how to adjust from there based upon the "enemy threat" of COVID-19. Planning, combined with the threat models, bought time for the commander to make more accurate decisions on a relevant and timely basis.

Develop threat models. When no accurate models were available to measure the extent or scale of COVID-19, and the data was changing regionally, the Academy brought together a crossfunctional academic team (math, statistics, biology, chemistry, and systems engineering) to develop "threat models" using real time open source intelligence (OSINT) data. The data was updated regularly and changed based upon the needs of planning and the commander's decision making requirements.

Increase testing for COVID-19. The Army has an informal but very sincere contract with the American public from which it recruits. The Army takes care of its own, and no Soldier is left behind. All returning Cadets are being tested. This demonstrates resolve to protect the force, sends an important message to parents and the greater American public, and reinforces the trust that the Army continues to maintain with America.

Utilize surveys as an effective tool to collect data to support decision making. Using staff survey expertise, the Office of Institutional Research team within the USMA G-5 developed a body of surveys that measured the physical health, mental health, academic progress/needs, and other wellness concerns of all Cadets. This also served as an accountability tracker. Surveys were not just confined to Cadet use; they were also used to quantify online/distance education information technology (IT) concerns by the faculty and staff. The information gathered from these surveys facilitated improvements to planning products, and allowed for the rapid changes during execution.

Use existing forums and battle rhythm events until they no longer work, then adjust rapidly and proceed forward. When using online collaboration tools, expect an increased demand and frequency of the existing battle rhythm. Account for this and be flexible to change.

Surge medical capacity using expeditionary practices. The local hospital was not set up to deal with COVID-19, as it normally dealt with orthopedic surgery related to sports types of injuries for young officers/Cadets. Leveraging available talent, the hospital was able to rapidly optimize existing capabilities for testing and expand medical capabilities/capacity to treat COVID-19 patients. The hospital transitioned from zero COVID-19 capability to a full-up seven bed COVID-19 ward. This involved training the existing doctor and nurse pool up to intensive care unit (ICU)-level standards.

Integrate social distancing into training management, planning, and execution. In training, separate all tactical formations by time and distance to enhance social distancing while still accomplishing the mission. This is harder than it may seem. Instead of a classroom of 100 Cadets sitting next to one another, can this be conducted in shifts? Can it be conducted virtually? This equates to tactical spread in the classroom, in training areas, at physical fitness locations, in barracks, and in the mess hall. This places a premium on small unit leadership.

Identify key sustainment requirements and develop alternative replenishment options, including non-traditional vendors. Accurate "burn rates" of consumables need to be identified to better conduct sustainment using a supply chain that is challenged and constrained.

Include virtual/distributed leadership development. Conducting virtual mission command, leveraging information technological advancements was a good news story. However, the supervision of what is expected and tasked was not as easy. Establishing rapport via online platforms takes more time and demands greater sensing by leaders at all levels.

CHAPTER 1

Planning

U.S Military Academy's (USMA's) mission is to educate, train and, inspire the U.S. Corps of Cadets (USCC) so that each graduate is a commissioned leader of character committed to the values of duty, honor, and country and is prepared for a career of professional excellence and service to the Nation as an officer in the U.S. Army.

Army Regulation (AR) 150-1, Organization, Administration, and Operation, 04 MAR 2019

From on or after 21 March 2020, the U.S. Military Academy and West Point conduct an area defense to support the community, commission the Class of 2020, and educate, train, and inspire the U.S. Corps of Cadets in order to preserve Army readiness.

OPERATION RESILIENT KNIGHT Mission

Situation

The U.S. Military Academy (USMA) at West Point is located on the western banks of the Hudson River in Orange County in southeast New York State. The county is bound by the Hudson and Delaware Rivers, and has one major interstate that passes north south to the west of West Point. The current population of Orange County is just under 372,000. Most importantly, in regard to this study, USMA is located approximately 43 direct miles (53 miles by road) due north of New York City. New York City has a population of 18.8 million, and is home to major international airports, which connect the United States to Europe and other international destinations. It is into this dense urban center that the coronavirus arrived from Europe in late February.

In a major city like New York City, it is not hard to understand how COVID-19 grew into a major pandemic by early June 2020, infecting just under 207,000 people, and causing more than 16,800 deaths. By early June 2020, New York State had over 378,000 confirmed cases of COVID-19, of which 24,259 lost their lives to the virus. Orange County was not immune to the public health crisis. Out of an estimated population of 372,800 people, 10,514 confirmed positive when tested for coronavirus, and there were 386 deaths (as of early June 2020). COVID-19 requires a sufficiently vulnerable population for the virus to spread. USMA was very close to this "hot zone." Because of this proximity, and in the interest of protecting the force, USMA needed a comprehensive plan to mitigate the spread of the virus on the installation and to initiate and deliver character development through the West Point leader development system to a Cadet population of just over 4,000 Cadets who were then spread across 470 counties in all 50 states.

To place this pandemic within the Academy's spring schedule, further context is required. The USMA spring break took place on 6 to 15 March 2020. On 6 March, the single-day new coronavirus cases in New York City stood at only seven. On 15 March, that number had increased to 134 new cases in the previous 24 hours. By 22 March, two weeks after the beginning of spring break, the new case count in New York City had risen to over 3,000 cases. Daily new cases continued to rise until May. Single-day spikes were noted on 30 March with 5,686 new cases; 3 April with 6,147 new cases; and hitting a high of 7,877 new cases on 14 April. Of significant concern was the medical capacity within the Hudson River valley region to manage this growth in new cases. If the capacity was exceeded how would the installation (minus Cadets) manage this health crisis using a small hospital that was not equipped to deal with this type of threat?

USMA was not alone in this situation. For comparison, the U.S. Naval Academy (USNA), located in Annapolis, Maryland, is also in close proximity to the major east coast urban centers of Baltimore, Maryland, and Washington D.C. The USNA is approximately equidistant to both cities by about 33 miles by car. Baltimore, according to public health statistics, had over 6,296 cases of COVID-19, which had claimed 274 lives by early June 2020. Washington D.C. had over 9,000 cases of COVID-19, and 473 lives were lost. In aggregate, the two cities (not counting the incidences of COVID-19 within the city of Annapolis itself, the capital of Maryland) was just under 15,300 cases of COVID-19, of which 747 resulted in death. The scale and scope of the pandemic in New York City was much bigger than the problem surrounding the Baltimore and Washington D.C. metropolitan area. The situation near USNA was just over four percent the size of the problem just south of USMA. As a result, the COVID-19 problem was much more alarming to the West Point garrison community.

Lead up to Crisis Action Planning

Shortly after spring break commenced at West Point, national attention was drawn toward the COVID-19 public health crisis, which drove initial policy guidance on the pandemic from within the Department of Defense and Department of the Army. Questions from senior Army leadership quickly surfaced on when the Cadets would return to USMA after spring break and if not after spring break, when. Adding additional urgency were the many concerned parents of Cadets who were asking similar questions. West Point alumni were also part of the concerned audience, many of whom were voicing their concerns that West Point needed to be decisive at this critical moment, and remain open for classes despite the growing evidence of the pandemic. In short, answers to these questions were needed when the exact nature of the pandemic was still not well understood.

Initial planning efforts started on Thursday, March 12th using available USMA staff. To make sound decisions, based on known facts versus anecdotal and emotion-laden evidence, the Superintendent sought quality advice on the nature and extent of the growing health threat and the options that he had available. Early planning efforts, while productive, revealed a gap in the Academy's ability to conduct deliberate crisis action planning. The governance structure at the Academy divides responsibilities across the institution, focusing on four major programs: academics, military training, physical fitness, and character development. Despite being a 3-star

level institution, the staff could not replicate the depth and breadth of the planning expertise normally found in an equivalent corps-level headquarters. As an institution, USMA staff were extremely competent and focused on developing, coordinating, and executing an annual campaign plan. Staff planning centered on consistent state-programmed events, based on the predictable annual academic/training cycle. Worst-case scenarios up to this point were focused on natural disasters (significant winter weather events) or active shooter scenarios, all of which were narrow in scope and normally would not have a deep-lasting impact upon Academy operations. A global pandemic on the broad scale presented by COVID-19 was beyond the planning capabilities of USMA staff without augmentation and expertise from across the entire institution. Additionally, there was not a designated surge-planning capacity established before this crisis began that could be activated rapidly and seamlessly with the appropriate resources and planning spaces. In fact, initial planning was conducted in the Superintendent's conference room, as a designated operational planning team (OPT) facility was not a routine part of day-to-day operations between the G-3 and G-5. Clearly, a cross-functional planning team was needed to address the demands resulting from this crisis.

There were some critical personnel moves that occurred at nearly the same time the initial planning was started. The previous USMA G-3 assumed the position of USMA chief of staff. The deputy operations officer, a Department of the Army civilian, assumed the acting role as operations officer until the replacement arrived. The deputy of the Character Integration Action Group was eventually identified to assume the role of USMA G-3. The transitions of these vital positions started before the COVID-19 crisis, but were not complete until nearly the end of the second week of planning. The officers are exceptionally professional and highly competent; however, they were new to the job and had not yet become accustomed to the demands that the health care crisis placed on them. Because of the new G-3's extensive planning background, he was brought into the planning effort early, and served in that role for the duration of the planning process. However, the officers stepped up to the challenges demanded of them. This change in personnel is a factor that needs to be considered. This could not have been forecast ahead of time, as the nature of COVID-19 was unknown in late February and early March when these personnel changes were made.

Planning Team: Traditional Structure versus Crisis Action Structure

Initial planning efforts were designed to improve the understanding of the COVID-19 threat to buy the time needed to develop options. It became evident early on that a cross-functional team of planning expertise was needed, leveraging academic subject matter experts (SMEs) with officers that had recent planning experience. A talent assessment, via an informal process, was initiated to identify officers with previous planning experience. Former battalion and brigade level operations officers, most coming from within the U.S. Corps of Cadets (USCC), were combined with the few officers that had completed the School of Advanced Military Studies (SAMS). These officers formed the foundation of the planning team. This planning team, initially led by a colonel from the Deputy Head of the Department of Law, worked directly for the Superintendent and chief of staff, before shifting to the G-3 and the G-5. Augmenting this

team were faculty members that possessed expertise in biology, statistics, systems engineering, etc. The majority of these experts came from the academic faculty, and were senior field grade officers that brought with them PhD credentials and expertise within their respective fields. Finally, recognizing that the garrison also had an important role to play, emergency operations center (EOC) planning representatives were brought onto the planning team. Having energized the West Point enterprise to address this situation, an ad hoc cross functional planning team was assembled. The active duty planners were the engine driving this planning process, using a doctrinal approach to develop the plan. It was mentioned by numerous officers who participated on this planning team that egos were left at the door. For example, there were many instances during the lengthy 12-hour (and longer) planning days where officers, who did not have an immediate role to play in the planning at the moment, pitched in to get coffee, helped with computer and other technological issues, or simply created a positive influence within the room. It was this transition from a traditional Academy G-3 planning structure to a cross functional crisis action planning structure that was crucial.

Operationalizing the Planning Process to Develop a Campaign Plan

During the early phases of planning, the focus was to provide an updated understanding of the threat and to create options. However, this initial stab at solving the problem did not tie solutions to known dates, aka timeframes, that would be easily recognizable when paired with the Academy's annual calendar and other known events. At the direction of the Superintendent, there was a need to operationalize planning to build a more enduring planning framework and develop a campaign plan. This broadened the planning effort and disciplined the process at the same time. The COVID-19 situation presented a scenario for which there was very little precedent to lean on. There was no existing template of planning products to cut and paste into a brief. With the operationalization of the planning process, the USMA response to COVID-19 was named OPERATION RESILIENT KNIGHT. This operationalization of planning was a significant turning point that proved deeply impactful. The Academy treated the virus as an enemy threat that needed to be defeated.

The operationalization of the planning process, coupled with the crisis action structure, still encountered the problem of how to best gather the Superintendent's guidance and present the recommended decisions that were the result of detailed planning. Similar to how a corps staff presents planning recommendations via a hierarchical set of leaders, USMA has a policy board, which is composed of the dean, the commandant, the athletic director, the chief of staff, and the garrison commander, amongst others, who served in a similar capacity during this crisis. Planning outputs produced by the planning team were presented to the policy board (later referred to as the 3-star decision board) to gather feedback and guidance, and gain approval prior to proceeding forward to the Superintendent. This involved a process and a forum that was familiar to the Academy, and was an integral part of the traditional institutional governance structure. As an institution of higher education, the Academy is required to maintain an internal and external governance structure, which includes an external governing board and internal governing committees. By making modifications to this structure, USMA has informed how the governance structure can be improved in the future. It was also a forum that had an existing

battle rhythm, but refined the purpose for the meeting to address critical planning decision points. In addition to this forum, the Superintendent was briefed daily during the battlefield update brief (BUB), where the staff presented updates on the situation. Lastly, as part of the Superintendent's personality, he was comfortable with walking into the planning venue to watch and listen. He used these periodic visits to impart his guidance as he felt necessary. This mix of traditional structures and battle rhythms, combined with the emerging need for crisis action structures, resulted in appropriate touch-points with the Superintendent. In the case of USMA, this process worked well once this "approval" chain was identified, refined, and implemented.

Headquarters, Department of the Army (HQDA) published an Execute Order (EXORD) that addressed Army-wide health preparedness and response to COVID-19. This was the higher headquarters order that drove planning for the Academy. Additional guidance contained in fragmentary orders (FRAGORDs) to the HQDA EXORD drove additional measures required, based upon the changing nature of the threat. It is quite clear from this higher headquarters guidance, that a priority in planning would be placed on protecting the force. This was amplified by Lieutenant General (LTG) Williams' planning guidance.

It took a week and a half for the crisis action planning team to develop a campaign plan that nested with estimated dates and developed lines of operation (LOO). In this case, the lines of operation were as follows: develop the future force, protect and maintain the force, strategic outreach, and sustainment. Within the LOOs were decision points that included the graduation of the class of 2020; the return of the remaining Cadet classes; and Cadet summer training. Against these known dates and events were the various "phases" of reopening of the state of New York and Orange County promulgated that served as conditions. As planning progressed from simply identifying options, the team developed a campaign plan that was phased and was anchored to key dates (moveable dates, but aim points nonetheless).

The results of crisis action deliberate planning were a base operation order (OPORD) and guidance for the next steps in the planning process. The OPORD was titled, "OPERATION RESILIENT KNIGHT." Using tactical terms, coupled with an operationalization of the planning process, a mission was approved that a team of military professionals could readily understand. The OPORD established the requirement of protecting the force (Cadets, faculty, and staff), while still maintaining the mission of academic/professional development of the Cadets, leading to eventual commissioning. This was to be a phased operation that included the following five phases; Phase I, set conditions; Phase II, return the class of 2020 and RSOI; Phase III, transition; Phase IV, Cadet summer training; and, Phase V, new normal and academic year 20-21.

COVID-19 Modeling to Support Planning and Decision Making

Military planners frequently use relative combat power analysis, coupled with intelligence preparation of the battlefield, to estimate threat intentions and develop enemy most likely courses of action. With COVID-19, the threat analysis, although similarly conducted, had many gaps and unknowns. To make sense of the virus, a structure of the threat had to be developed using current real-world open source data. Within the dean's directorate, PhD-level experts in biology, chemistry, math, statistics, and systems engineering were pulled together to form a team to create

COVID-19 models. This team used real-world open source data from USAFacts.org, John Hopkins University, Washington Institute for Health Metrics and Evaluation (IHME), Los Alamos Lab, and the Youyang Gu (Massachusetts Institute of Technology) data sets. Models were then created to forecast the extent of the virus, focusing on the 487 counties where Cadets were living, along with Orange County, where West Point is located. The team used sound statistical analysis to present trends and predict changes of the pandemic by Federal Emergency Management Agency (FEMA) region. As the virus changed, the team adjusted their models accordingly. This was another impressive use of academic talent management.

Developing Lines of Operations

Once the campaign plan had been approved, the next major evolution in the planning process was to refine the LOOs. Four LOOs were identified and each was assigned a "LOO Chief," an O-6 colonel. LOO 1 was titled, "Develop the Future Force," and focused on the training and education requirements for the Cadets. LOO 2 was titled, "Protect and Maintain the Force," and focused on protecting the force. LOO 3 was titled, "Strategic Outreach," and focused on communicating with the Academy's various different audiences. This included upward and outward audiences and downward and inward audiences, which were local to the Academy area for the most part. This was all to generate a consistent message to inform and protect the force. Lastly, LOO 4 was simply titled, "Sustainment," and addressed the growing sustainment requirements necessary to meet public health needs and address supply chain issues caused by COVID-19 disruptions.

The leadership representing each LOO (LOO chiefs) formed a forum called the LOO Council. This body ensured that planning across LOOs was integrated with the broader planning efforts. This prevented the stove piping that often takes place when break out groups are used during planning.

Interestingly, the LOO chiefs, all O-6 colonels, were brought onto the planning team to lead their respective LOOs through the planning process. In all cases, these leaders were "drafted" into the process because of their thorough understanding of the Academy and how it functions, and for their subject matter expertise for which their respective LOOs were predominantly expected to provide across the enterprise. Each LOO team was assembled using the talent management practices discussed above. Doctrinal military decision-making process (MDMP) planning experts were placed in each team, alongside SMEs from academic disciplines or other staff sections.

The sustainment LOO needed an additional talent-management assessment to identify the most appropriate expert to lead this LOO. In this case, it was determined that the military deputy athletic director was the officer with the best sustainment experience. He possessed previous support operations (SPO) experience, and a more recent background in higher-level strategic sustainment. He was the most qualified to lead that LOO. The USMA G-4 was not designed to manage current operations while simultaneously supporting crisis action planning. The depth and breadth of experience that this colonel possessed, combined with his positive demeanor, made him a solid choice for the sustainment LOO.



Figure 1-1. USMA G-3 Briefing the USMA COVID-19 Campaign Orders Framework at Camp Buckner

With the aid of prior planning products, the published base OPORD, and LOO analysis, the last step in the planning was to create teams to address the sequential list of key tasks that were identified during planning. The key tasks were reception, staging, onward movement, and integration (RSOI); graduation; Cadet summer training; and R-Day, that became subordinate directives of the base campaign OPORD. They were eventually captured as appendices to Annex C of the base OPORD.

Collaborative Planning Tools

The Microsoft (MS) Teams collaboration platform enabled the immense amount of planning that went into developing the campaign plan and OPERATION RESILIENT KNIGHT OPORD. Introduced to the Academy over a year ago when the institution migrated from .mil to .edu domains, the staff and faculty were quite comfortable using the application. This enabled remote collaboration on planning, often from a laptop connected to a suitable WiFi signal. Additionally, survey databases and spreadsheets were used with MS Teams, which resulted in near real-time decision quality information to be introduced into planning and used to brief senior leaders. Had the Academy made the switch to MS Teams in response to the health crisis, it is likely that there

would have been greater start-up friction, as many would have struggled to learn the full capabilities of the system. The success of MS Teams also had a downside. As MS Teams was easy to use, even with an iPhone using cellular service, in-stride meetings could and often were conducted outside of the battle rhythm cycle. The temptation to simply jump onto MS teams was too easy to do. This notwithstanding, the MS Teams collaboration tool was a success story. However, it is important to note, with all the success, the migration to .edu and MS Teams actually hindered collaboration and communication between USMA and garrison entities with the Keller Army Community Hospital (KACH). Although USMA grants "guest accounts," these lack the complete functionality of organic users. Additionally, only a few people within the hospital are tied onto this platform.

Generating Shared Visualization

As the Academy operationalized the planning process, it also implemented battle rhythm briefing events to present updated decision-quality information to the Academy senior leadership. This facilitated a shared visualization. For example, the commander's BUB became a regular daily event. Conducted over MS Teams, updates were provided from across all "warfighting functions." Most notable were the COVID-19 model updates presented each day, which helped better understand the threat. The BUB was conducted in the morning and usually took an hour to complete. Figure 1-2 is an example of the BUB agenda.

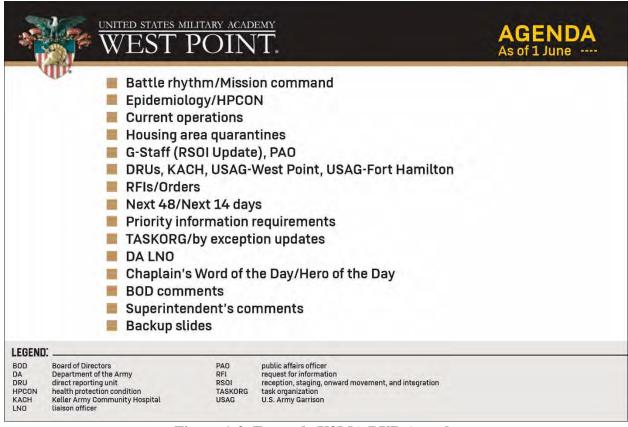


Figure 1-2. Example USMA BUB Agenda

Taking a technique used by operational units, the BUB was a very effective briefing tool to generate shared understanding and visualization.

Lessons and Best Practices

There were numerous best practices developed during all phases of planning. A few are listed below to serve as areas for which USMA can sustain and continue to improve upon.

Operationalization of the Planning Process. USMA treated the COVID-19 health threat like a named Army operation and mission. This necessitated an all hands approach to planning and execution. This involved the methodic and deliberate employment of the doctrinal MDMP to identify solutions against the complex and unstructured problem known as COVID-19.

Building a Cross-Functional Planning Team. This situation was akin to a 100-year flood, it does not happen often, but when it does it stresses systems in unimaginable ways. USMA brought the best planners and academic experts to identify the true nature of the public health threat and then develop a campaign plan to address it. Using simple yet effective talent management practices, a strong team was built, bringing together planning and subject matter expertise from across the entire West Point enterprise. The challenge is how to retain a deliberate crisis-planning capability when the Academy's table of distribution and allowance (TDA) does not authorize a standing planning team of the size needed to conduct this level of detailed planning. The Academy staff is currently working on building options that retain this functional planning capability to meet future needs.

Distributed Mission Command/Command and Control. USMA migrated to the .edu domain over a year ago, and when it did, it also migrated to MS Teams. This was a planned upgrade designed to bring the Academy up to the information technology (IT) standards used at other academic institutions. As a result, the Academy was familiar with MS Teams when the health crisis hit. It was not caught flat-footed on how to plan via distributed collaboration. MS Teams also supported the rapid and seamless migration to online/distance learning. Additionally, MS Teams enabled distributed planning and ability to brief leadership remotely—sometimes by cell phone application. MS Teams, alongside other academic software (Google Classroom and Blackboard), enabled a three-day shift from resident classroom instruction to remote online/distance, learning while still maintaining academic standards. The importance of MS Teams cannot be overemphasized.

Create Decision Space. Initial planning efforts focused too narrowly on identifying how to address Cadet learning in a COVID-19 environment—do the Cadets return or not. This was not what the Academy senior leadership needed. Assuming the epidemic was going to interrupt the Academy schedule for the foreseeable future, a cogent campaign plan that took a long view, and was tied to known points, was needed. There are academic, military, physical, and character requirements that are known points on a calendar. These are programmed events every year that adjust only slightly. The planning team developed a campaign plan that accounted for these known points, and then determined how to adjust from there based upon the "enemy threat" of COVID-19. Planning, combined with the threat models, bought time so that the commander could make more accurate decisions on a relevant and timely basis.

Developed Threat Models. When no accurate models were available to measure the extent or scale of COVID-19, and the data was changing regionally, the Academy brought together a cross functional academic team (math, statistics, biology, chemistry, and systems engineering) to develop "threat models" using real-time open source data. The data was updated regularly and changed based upon the needs of planning and the commander's decision-making requirements.

CHAPTER 2

Reception, Staging, Onward Movement, and Integration

Mission Planning, Preparation, Coordination, and Rehearsals

Per U.S. Military Academy (USMA) planning, reception, staging, onward movement, and integration (RSOI) was conducted as a key task within the "Protect and Maintain the Force" line of operation (LOO). RSOI was placed under the able leadership of a post-battalion command lieutenant colonel, who was a regimental tactical officer (RTO). Based upon the base operation order (OPORD), a fragmentary order (FRAGORD) was developed by the RSOI planning team to address mission specific tasks, support requirements needed, and the command and control necessary to conduct RSOI for the returning class of 2020, along with other select Cadets.

Before conducting the RSOI for the returning graduating class, a few of the officers and staff assigned to the RSOI team visited Fort Jackson, South Carolina. The purpose was to observe the reception and processing of new Army recruits as they arrived at Army basic training. This visit helped the RSOI team to refine and improve the same process at West Point. Additionally, the team also delved into planning products produced by other U.S. Army Training and Doctrine Command (TRADOC) and U.S. Army Forces Command (FORSCOM) units. For instance, the RSOI team did review planning products from FORSCOM, including their execute order (EXORD), Sustaining and Building Readiness within a COVID-19 Operating Environment. In short, the planning for supporting RSOI at West Point was not conducted in a vacuum. The team relied upon the experiences and lessons of others that were grappling with the same problems. This sharing of experiences was a best practice.

The team that conducted the RSOI process was an aggregation of active duty and civilian staff from across USMA. As an all hands effort, it was a very effective team. However, there are limitations to how long this team can remain assigned to the task of RSOI for the remaining Cadets to return to West Point later in the summer. Programmed events during the summer include, summer school class sessions, select pre-season sports training supporting the fall athletic calendar, and Cadet summer training. All involve dedicated manning to support. RSOI for the class of 2020 was very effective, since most staff were not encumbered with a "day job." RSOI became their sole focus. Although an effective and efficient RSOI process is still possible for the remaining Cadet population, it will need to be performed using a potentially smaller staff, and likely over a longer timeframe, as many of the staff will need to return to teaching college courses or support summer field training. It is important to note that this realization was not lost on the leadership and planners supporting RSOI. Many process improvements and other lessons learned were communicated daily during the evening RSOI synchronization MS Teams battle rhythm events. Many of these efficiencies and process improvements were already factored into the second wave of RSOI that occurred after the graduation of the class of 2020.

Separating the various stages in the process by time and distance, and spacing the arrivals of the returning second lieutenants (2LTs) in a deliberate flow so social distancing was maintained, was critical to mission success during RSOI. Achieving standoff from the main Academy grounds, RSOI was conducted at Camp Buckner, the field training area where Cadets conduct summer

and field training (see Figure 2-1). Camp Buckner is located just under six miles straight line distance from the main campus. There are numerous terrain features between the Academy proper and Camp Buckner. By vehicle, the drive time using the Stony Lonesome gate is about 20 minutes one-way, roughly 9-miles. Camp Buckner, despite hosting aged buildings, is a well-developed facility to conduct RSOI in a deliberate and efficient manner. The use of Camp Buckner was well developed and a best practice. It reduced the potential risk of contact between COVID-19 positive 2LTs and the main campus and family housing area populations, and bought time for proper medical screening and testing. It also provided a logical exit point from the remainder of the returning Cadet population for those that did test positive. It was an important lesson learned that although a deliberate and controlled environment is necessary, which is something Camp Buckner provided, one to six miles of standoff was not necessary, and the "compound" at the USMA Preparatory School (USMAPS) facility provided an even more adequate location to control the staging (testing and holding) of the population. In the later stages of RSOI, this process was relocated to the USMAPS facility.

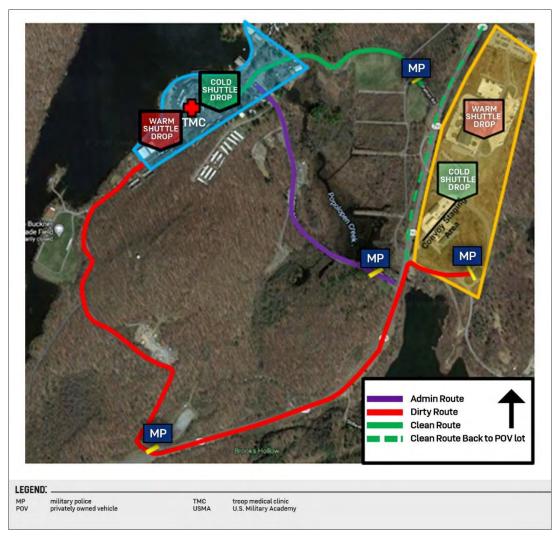


Figure 2-1. Diagram of Camp Buckner and the Transportation Motor Pool where RSOI was Conducted

Early in the planning, it was recognized that continuing RSOI for the returning sophomore through senior classes at Camp Buckner would adversely compete with the summer training requirements that need to use this same facility. During planning, another option was developed, to conduct the latter portions of the remaining RSOI at the USMAPS compound. The USMAPS facility is located adjacent to the Washington gate entry control point, and is just up the street from the Keller Army Community Hospital (KACH). Testing times would be condensed, and drive times between USMAPS and the barracks area would be shortened.

Coordination with other supporting organizations to support the RSOI process was conducted during planning, and then rehearsed and brought forward into the execution of RSOI. Medical support to summer field training has been a recurring service provided every year. Using that similar model, medical support to RSOI using the medical aid building was fairly seamless. Since Camp Buckner and the Department of Public Works motor pool were adjacent to one another, and belonged to the West Point installation, coordination for their use was easy using traditional mission command networks. Existing processes and habitual relationships facilitated the support needed to conduct RSOI.

Adequate signage was coordinated and spaced out as needed within each of the RSOI stations. This was a best practice, as it aided significantly towards informing the 2LTs of the process they were about to begin, and ensured a more orderly flow. All RSOI stations had station attendants that were well versed in their duties. The confidence and professionalism of the staff facilitated a smooth RSOI process. This could not have been possible without a series of rehearsals before the arrival of the first cohort on 26 May. The amount of detail and preparations that supported RSOI was superb.

Pre-arrival Cadet Requirements

Cadets conducted daily surveys coordinated through the Academy's Office of Institutional Research (OIR). Data management was key to the RSOI process even before the graduating class began their return trip. The justification to collect survey data was the Public Health Emergency order, which was subject to legal review. Every effort was made to ensure the directions established within the Health Insurance Portability and Accountability Act (HIPAA) were maintained, and personally identifiable information was protected. This was made possible by the loosened restrictions due to the public health emergency. OIR personnel ensured that survey questions underwent a vetting process through a working group, which was attended by representatives from across USMA.

Cadet surveys were able to assess each Cadet's physical and mental well-being before their arrival. This was used to determine if any additional preventative health measures would be necessary before the arrival of the Cadet cohorts. COVID-19 screening questionnaires were conducted in advance of Cadet arrival to identify trends. Daily temperature screenings were conducted by each Cadet and communicated via the surveys in order to determine if Cadets had health concerns before they arrived at West Point. Additionally, questions regarding general wellness were also included in the surveys. This survey technique was quite successful and a best practice, especially with the involvement of medical personnel to review, contact, and provide medical recommendations.

Arriving Cadets

The class of 2020 arrived by air and privately owned vehicles (POVs). The approximate percent split was 40 percent by air and 60 percent by POV. This necessitated coordinating with the Newark International Airport to establish a USMA aerial port of debarkation (APOD) to receive the 2LTs arriving by air. The relationship established between West Point, Newark airport, and the airport United Service Organization (USO) was superb. In this case, the APOD reception center was established within the international terminal (terminal B), which was not as busy as the domestic terminals. This facilitated social distancing, and eliminated passenger congestion at the reception center. The arrangement of the reception center stations is addressed below. Coordination for bus transportation was integrated into the plan, and was very well orchestrated during execution of RSOI. Additionally, the USO, which was not operational at the time, allowed the use of their airport facility to provide food and water to the returning 2LTs before they were transported to Camp Buckner. This process was a solid best practice from start to finish.

All remaining 2LTs that arrived by POV were instructed to report to the transportation motor pool (TMP) by arrival time windows, established to space out the arrivals and to reduce congestion with later stages of RSOI.

Initial Reception

2LTs returning to the West Point by POV were directed to the TMP across the street from Camp Buckner. Upon arrival, the 2LTs answered questions listed on a screening form (Figure A-1 in Appendix A), and were given two cloth masks and a bottle of hand sanitizer (See Figure 2-2). The screening form captured the following symptoms; presence of cough, shortness of breath, fever, chills, muscle pain, sore throat, and recent loss of taste or smell.



Figure 2-2. A Returning 2LT Receives an Initial Screening, Masks, and Hand Sanitizer before Moving his Vehicle to Temporary Storage and Continuing RSOI

Efforts were taken at the initial stages of reception to minimize the risk of infecting the cadre providing the assessments and directing flow of 2LTs. Upon arrival, screening personnel wore masks and gloves, and continuously monitored each other for symptoms of illness. The RSOI process would take advantage of outdoor space as much as possible, and would use social distancing measures when transporting, briefing, queuing, or testing.

At this initial stage, if a 2LT showed one or more symptoms of the virus, they were told to park their car in a designated "hot" lot within the TMP, and directed to board a bus/van that would transport them directly to the KACH emergency room for immediate testing. If a 2LT cleared this stage without presenting symptoms, they would park their car in a different designated lot at the TMP. From there, they would load a bus that would take them to nearby Camp Buckner (See Figure 2-3).



Figure 2-3. A Socially Distanced Convoy Brief for the Movement from the TMP to the USMA Cantonment Area, where Integration will Continue

Aerial Port of Debarkation

Newark International Airport was designated as the APOD. This location was chosen as it was the most direct route to the reception stations at Camp Buckner, while also minimizing the risk of exposing returning 2LTs to the hot spots around La Guardia or John F. Kennedy (JFK) airports.

The personnel accountability team (PAT) was led by USMA G-1 personnel, with augmentation from Academy faculty, medical personnel, and 3rd Battalion 304th Infantry Regiment. The team was stationed in Terminal B just outside the USO. Coordination with the airport that had been set up before the Cadets arrived ensured that the adjacent seating and station areas would be used for receiving, initial screening, and staging of returning 2LTs only (See Figure 2-4). Many efforts were taken to route routine civilian passenger foot traffic away from and around the APOD reception center.



Figure 2-4. A Member of the Class of 2020 Arrives at the Newark APOD

Reception Station Laydown and Purpose

Busses coming from the TMP or from the Newark APOD to Camp Buckner contained 2LTs who passed the initial screening tests. These 2LTs were dropped off at the camp's theater, where their movements would continue to be tracked using the Microsoft (MS) Teams database (see Figure 2-5). They were given a place to rest and eat a meal, ready to eat (MRE) under several tents set up outside and adjacent to the theater. The main purpose of this staging and holding area was to prepare 2LTs to move to the camp's troop medical clinic (TMC) to undergo COVID-19 nasopharyngeal swab tests.



Figure 2-5. The Camp Buckner Theater, with Green Tape on the Chairs to Identify Social Distancing Control Measures

After the 2LTs completed the swab samples at the TMC, the samples were driven back to KACH for testing. Because of the transit time to the hospital, the time it took to process the specimen, the time to transfer the results into the medical database, and then the time to relay the results to the RSOI tactical operations center, the results of the tests normally took two and a half hours to complete, on average. Many factors went in to minimizing this lag time and safeguarding 2LTs from each other. 2LTs maintained social distancing, masking, hand washing, and proper personal hygiene as much as possible. They were instructed to keep in mind with whom they were nearest, in an effort to make contact tracing easier.

If an individual's lab result was reported back as positive for COVID-19, station cadre discreetly approached the individual and escorted them and their effects to a separate quarantine area in the vicinity to the TMC, where they were notified of the test result by the onsite physician. Additionally, an immediate contact tracing was performed to identify fellow classmates who may then require quarantine. If the individual had driven a POV to the TMP, they would be transported by a separate bus to pick up their vehicle from the TMP and then directed to the Cadet parking area inside USMA cantonment. The same bus would then take the individual to a

quarantine barracks. Each COVID-19 positive individual's condition and location was tracked and communicated to the chain of command using a database in MS Teams that had been created for this purpose.

Testing

All returning class of 2020 2LTs were tested for COVID-19. The purpose for 100 percent testing was more far-reaching than simply protecting the force at the West Point installation, although that was important too. Recognizing that the class of 2020 returned to the Academy from every state in the U.S., some from other hot spots beyond New York City, there was a concern for spreading the virus on the campus once the 2LTs returned if no testing was conducted. The risks were too high not to test. Additionally, each 2LT, upon graduation, would be headed to their initial basic officer leadership course. It was determined that testing would minimize sending COVID-19 positive Cadets onward to follow-on duty stations. This had far greater implications than parochial interests within the West Point Garrison perimeter. It is important to emphasize that RSOI was not conducted exclusively to test Cadets. There were additional training, administrative, and medical tasks that needed to be accomplished prior to the follow-on assignments for each senior.

100 percent of returning 2LTs were tested. The only difference in testing was the location. If an individual had symptoms upon arrival at the APOD or TMP, they were taken directly to KACH for testing. If they had no symptoms, they were tested at Camp Buckner.

2LTs that arrived with suspected symptoms were immediately escorted to the KACH emergency room. There, they received priority testing at the onsite laboratory. If confirmed positive, the 2LTs were moved to isolation barracks. If negative, doctors made the determination on whether or not to admit the 2LT to the quarantine barracks for further monitoring, or return the 2LT to normal barracks with their peers.

All other returning 2LTs received a nasopharyngeal swab test at the Camp Buckner medical station during the reception phase of returning to the Academy (See Figure 2-6). The tests were submitted in batches and sent to the laboratory at KACH for testing using one of two GeneXpert nucleic acid amplification test (NAAT) machines.

Additionally, as one of the first medical testing facilities offering serologic IgG antibody testing, all class of 2020 2LTs requiring a blood draw for human immunodeficiency virus (HIV) testing also completed IgG testing. Results from the IgG testing adds an important element to ongoing force protection efforts, and assists the Army public health command and USMA in developing a longitudinal COVID-19 testing strategy.



Figure 2-6. Medical Aid Station, where 2LTs Awaited COVID-19 Testing

2LTs remained at the reception holding area at Camp Buckner while the results of their tests were completed by lab personnel at KACH (See Figure 2-7). During this time, they remained socially distanced, ate lunch, and received briefings on what to expect during the integration phase back into the barracks at West Point. On average, from test sample collection to the return of results, the process took about two and a half hours. By the end of the first week of returning 2LTs, testing efficiencies had decreased the wait-time to two hours.



Figure 2-7. COVID-19 Equipment at the TMC at Camp Buckner

Cohorting

In an effort to stagger the arrival of the class of 2020, and not over-extend the Academy's capability to test 2LTs, the class was separated into four cohorts of approximately 275 2LTs each. The graduates planned their return trips with guidance from the brigade tactical department (BTD). The return would take place over the course of four days (one cohort per day), and would have to factor in travel times from home stations across the U.S. to the Academy.

Each cohort was further divided into "Grey" and "Gold" teams. This gave contact tracing teams an additional level of control over the personnel touchpoints between 2LTs in the barracks and Cadet area.

The 2LTs completed station clearing and pre-graduation tasks as a cohort, separated by Grey and Gold sections, for the remaining two weeks prior to graduation. The 14-day timeline offered the space needed to safely complete all graduation requirements, medical training (leading and living in a COVID-19 environment), clearing, cleaning, packing, and out-processing requirements smoothly in a socially distanced environment. These cohorts arrived, lived, ate, and trained as a team for the remainder of their time at the Academy.

Social Distancing/Personal Protective Equipment

Social distancing and the disciplined use of face masks was modeled and enforced by all station attendants. At each station, seating was properly spaced to maintain social distancing (See Figure 2-8). At stations that required a queue for 2LTs to stand in line, tape marks were added to the floor six feet apart to aide in maintaining safe social distancing (See Figure 2-9). Hand sanitizer and facemasks were provided to each 2LT, as explained earlier. However, additional hand sanitizer dispensers and hand washing facilities were located at each RSOI station (See Figure 2-10). If a mask fell apart or was deemed no longer serviceable, replacements were provided. All medical personnel station attendants wore proper personal protective equipment, which at minimum consisted of a surgical mask and gloves. Personnel involved in aerosol producing procedures wore protective gowns, face shields, gloves, and N95 respirators. All of these measures served a practical preventative health purpose, but they also started to establish personal hygiene habits that each 2LT would carry forward beyond graduation.



Figure 2-8. Staging Area for Graduates to Await Buses to Camp Buckner



Figure 2-9. Returning 2LT being Processed for a Medical Screening with Social Distancing Tape



Figure 2-10. 2LT being Briefed Outside Camp Buckner Theater, with Handwashing Stations, Masks, and Social Distancing Measures

Cleaning

There was an understood mantra during the one-day RSOI process. If someone touched it, they cleaned it. Cleaning disinfectants, paper towels, anti-bacterial wipes, and other cleaning supplies were on-hand and made readily available at each station throughout the entire RSOI process. All seats, clipboards, tables, and other equipment were cleaned regularly (See Figure 2-11). This was demonstrated and modeled by station attendants, and expected of the 2LTs as well. Although not fun, this technique was designed to prevent the spread of virus laden airborne contaminants that potentially could have landed on hard surfaces and been spread as a result.



Figure 2-11. Soldiers conduct an area cleaning following a briefing of 2LTs at the Newark APOD.

Tracing

Contact tracing was a task assigned to the COVID-19 Task Force, composed of the West Point Military Band, and augmented by others. Team Trace was established to conduct contact tracing in the event this degree of research was required (see Figure 2-12).

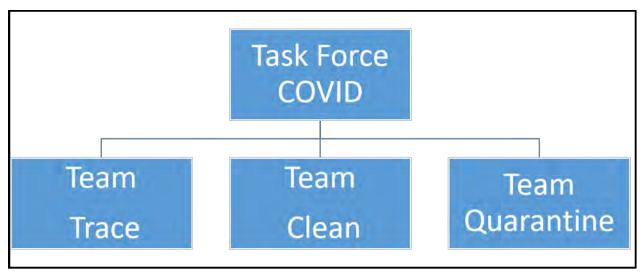


Figure 2-12. Task Force COVID was a Subordinate Task Force Assigned to KACH, that Supported the Garrison Emergency Operations Center

Isolation/Quarantine In-flow

The initial screenings at the Newark APOD, the TMP at USMA, and the nasopharyngeal testing conducted at KACH provided points where 2LTs that arrived with symptoms or tested positive would off-ramp from their cohort's activities temporarily. They would then move into a quarantine or isolation barracks for additional monitoring.

At each point of screening or testing, "hot" vans with drivers were on standby to move the symptomatic or positive test 2LTs away from the remaining graduating class and into a quarantine barracks (if they were symptomatic) or an isolation barracks (if they tested positive) (See Figure 2-13). These barracks were located on the USMA cantonment, and separated from day-to-day traffic by U.S. Army Garrison (USAG) West Point.

Isolation	Quarantine	
Isolation is for individuals that test positive	Quarantine is for individuals that come into	
for COVID-19.	contact with a COVID-19 positive individual.	



Figure 2-13. The Quarantine Barracks, where One COVID-19 Suspected Individual would be Isolated Per Room

An area of concern that was noted by Academy leadership was the potential for those placed in the quarantine or isolation facilities to experience adverse mental health impacts from being removed from their cohorts and network of friends. Additionally, in the case of those assigned to the isolation barracks, initial guidance was that those residents were to not leave their rooms. Despite the fact that each room had adequate computer connections to maintain online social engagement, the 2LTs could only enjoy so much screen time. They needed another creative outlet to keep their minds and bodies engaged, while still feeling like a part of the Army team. A fitness area was created for those in quarantine to afford the ability to conduct physical training as a way of improving their fitness and overall state of mind. Leadership quickly recognized how isolating, and potentially depressing, these living conditions could be and wanted to prevent negative consequences of such prolonged isolation. Direct social engagement was needed beyond the twice a day required medical checks of each resident. As RSOI extends into late summer, and the potential population of those in quarantine/isolation grows, this problem will need to be revisited by competent medical authorities to address any additional areas of need. Nearly every COVID-19 positive 2LT/Cadet that returned to West Point was asymptomatic and

stated that they felt in good health. Although they recognized the importance of not spreading the virus to other members of their cohorts, they did not want to be isolated either. While coronavirus is not yet fully understood, this is a problem that will be repeated elsewhere in the Army where Soldiers are living in close proximity to one another in the barracks. A menu of possible solutions needs to be identified and made available to the force.

Reception, Staging, Onward Movement, and Integration Supporting Follow-On Returning Cadet Cohorts

Immediately following the class of 2020 graduation, USMA staff returned to refining the RSOI process for the remainder of the returning West Point Cadets. Phase III for RSOI and Cadet summer training started on 23 June 2020. This involved a number of significant changes based upon lessons learned, identified during the earlier RSOI iterations at Camp Buckner. The biggest change was the venue for the remaining RSOI process, moved from Camp Buckner to the USMAPS facility. This enabled Camp Buckner to support Cadet summer training. The relocation also afforded a more truncated time-distance between the RSOI facility (USMAPS) to KACH, the quarantine and isolation barracks, and other more interior points on the campus. A travel team was created, which streamlined Defense Travel System (DTS) submissions and approvals for the follow-on cohorts awaiting travel to USMA. Lastly, the returning cohorts were built upon training requirements, not by class or regiment/company. These changes introduced efficiencies learned during the initial RSOI supporting the class of 2020.

The relocation of the RSOI process from Camp Buckner to the USMAPS facility was seamless. Using the USMAPS auditorium, indoor gymnasium, adjacent physical training field, and parking lots, the RSOI process was nearly identical to the one used at Camp Buckner. As mentioned earlier, this allowed Camp Buckner to be used for Cadet summer training, which would take place concurrently with the latter portions of the RSOI process. Relocating the RSOI process had been planned during initial planning, so making the shift was expected. The necessary level of detail was added to RSOI planning products, briefed to the RSOI team, rehearsed, and then executed starting on June 24th.

As mentioned earlier, the relocation of RSOI to the USMAPS facility brought the process closer to KACH. Instead of a 20-minute drive to deliver COVID-19 nasal samples to KACH, the delivery time was reduced to 2 to 3 minutes using a golf cart. This also brought Cadets closer to their barracks, and enabled a quicker turn-around time for Cadets to return to their rooms. Every Cadet needed to return to their room to pack, move equipment and personal belongings to the trunk room, clean and sanitize, and clear their room with their tactical officer to move-in standard for another Cadet to occupy later in the summer. It was assumed that approximately 1.6 percent of the returning Cadets would test positive for COVID-19. The relocation of RSOI to USMAPS also brought the Cadets closer to the quarantine and isolation barracks, where their 14-days of health monitoring would begin. While these distance reductions did not appear to be that drastic, the savings in time were significant.

The rest of the returning Cadets were surveyed in a similar manner to the class of 2020. Each Cadet completed surveys, which were used to assess health and wellness. Furthermore, before reporting to West Point, each returning Cadet was asked to conduct an at-home 14-day self-monitoring period. This was designed to reduce the incidence of virus-positive Cadets upon their return to the Academy.

The whole-of-enterprise was needed to support the RSOI process, but there were reductions in the numbers of the Department of Military Instruction (DMI) and USCC staff that could be dedicated to the RSOI process, as they were needed to conduct combat strength training (CST). In order to address this manning shortfall, a task force was created of soon-to-permanent change of station (PCS) uniformed personnel, which ultimately stood up Team Travel. This enabled more efficient processing of DTS authorizations supporting the travel and tracking requirements of all Cadets returning to the academy. The purpose of the team was to centrally manage each cohort with a smaller group of leaders, led by a cohort officer in charge (OIC). Each cohort OIC had varying numbers of team members, depending on the size of the cohort they managed. This improved effectiveness and efficiency as the cohort OICs could focus solely on their group of returning Cadets. Therefore, the OICs were able to maintain consistent messaging and guidance, versus relying on 36 separate teams that brought in the class of 2020 graduates. This process was not as stressed during the class of 2020's return. Travel authorizations for the class of 2020 were managed by company tactical officers and noncommissioned officers (NCOs). With the increase of total throughput by a factor of four, the need to identify a process and a team to handle bulk travel requirements in a more centralized and efficient manner rose. This was a best practice. This leveraged an experienced team of officers and senior NCOs to support RSOI before they conducted their PCS later in the summer.

As mentioned earlier, the class of 2020 returned in cohorts based upon their assigned regiment and company. The second wave of RSOI refined that approach to a more practical grouping of cohorts based on training requirements. This started with cohort 7, the summer garrison regiment, and concluded with cohorts 22-24, which included 1st and 2nd class Cadets conducting Cadet leadership development later in the summer. The chronological progression of training requirements drove the return time for each cohort. For comparison, think of this like the echelons in a deployment, where capability (in this case Cadets) is deployed based upon the priority of need. This was a very effective method of structuring the returning cohorts. Returning Cadets would return to the Academy, enter the RSOI process, and then proceed directly to their assigned training—conducting medically supervised self-monitoring concurrently.

Supporting the increased testing demand, the KACH laboratory received an additional two GeneXpert XVI testing analyzers in mid-June. This brought the testing capacity to over 500 samples per day, compared to the earlier capacity of only 256 per day. This increased capacity, along with the closer distance between the RSOI stations and KACH, led to significant time savings.

Finally, the reception day, also known as R-Day, is traditionally the day all incoming freshman report to West Point to begin in-processing to the academy and start Cadet basic training. Recognizing that the volume of Cadets coming into their Plebe year would not enable adequate

social distancing, it was determined to expand R-Day into a three-day evolution. This split the Plebe class into thirds (415/413/413 Cadets per day), which was estimated to be a more manageable population. The freshman Cadets would conduct their RSOI at the USMAPS facility, and then transition to the barracks area to begin initial training. Again, all freshman are to be tested for COVID-19 in the same manner as all other returning Cadets. R-Day festivities also frequently involve the participation of parents of the new Plebe class. Special considerations were made on how best to include the parents in the traditions of R-Day. Based on the parental liaison officer's recommendations, welcome events are planned to take place at the West Point Visitor's Center complex, which is located outside the front gate to the Academy. Some parents are traveling to West Point from states that require a mandatory 14-day quarantine by New York State public health directives. Arrangements are being coordinated with state and county health authorities to include parents under the same agreement as Cadets traveling on orders to a federal installation, who are waived of the quarantine requirements. However, families of the Plebe class are still required to depart New York shortly after R-Day events have concluded. The Plebe class will conduct their 14-day self-monitoring under the careful supervision of the brigade surgeon during Cadet basic training.

It is clear, based on the changes made to the RSOI process, that the lessons learned during the reception of the class of 2020 were captured and aggressively acted upon. Adaptations of the RSOI process to a new location were conducted without difficulty due to the meticulous planning investment that started in late March. Additionally, numerous efficiencies were identified which, when taken one-by-one, were not that big, however, when captured over a period of time, led to significant savings in time and resources. The power of self-evaluation by each and every member of the RSOI team and other members of the USMA staff led to these process improvements. Additionally, these enhancements will continue to uphold the same preventative health measures needed to defeat COVID-19 at West Point.

Lessons and Best Practices

Detailed and thorough planning was spent on the RSOI process, which, when combined with rehearsals and well-coordinated preparations with supporting agencies, led to a smooth and highly effective RSOI process for the returning class of 2020. Just about every contingency was considered and accounted for in planning, and was carried forward into execution. The investment in terms of time and resources was necessary, considering the health risks posed by the coronavirus.

The RSOI process leveraged the use of adjacent training areas near the campus proper, to ensure stand-off was observed between various stations in the RSOI process. The initial screening station at the TMP was approximately a half-mile from the movie theater facility at Camp Buckner. Camp Buckner had plenty of space to spread out the RSOI stations to effectively maintain social distancing throughout the process. The distance between Camp Buckner and the main campus further ensured effective standoff between the different stations in the process. This led to effective separation of cohort chalks by time and space, further mitigating the spread of the virus during RSOI.

The RSOI process was not static. It changed as necessary to address potential gaps in the process that might reintroduce unacceptable risks. It also identified efficiencies that were gained over time and through experience. A daily end-of-day RSOI synchronization, conducted on MS Teams, was the forum and recurring battle rhythm event to discuss the day's results. It also provided an opportunity to discuss issues and identify solutions. All voices were heard and respected. As a result, process improvements were identified and implemented daily. This was a solid best practice.

The command and control network used to manage and monitor the RSOI process was well planned and brilliantly executed. All stations were connected remotely to MS Teams to provide near-real-time updates on the flow and status of the RSOI process. Additionally, radio communications were employed and used at each station to address minor issues and control the rate of Cadet in-flow more efficient and effectively.

The use of signage to facilitate control at each station was well planned and integrated into the RSOI process. Products were professionally developed and visually appealing. This enabled the Cadets to be more aware of the process as they were going through it. Being better informed, the Cadets were more cooperative and demonstrated grace throughout the process.

In the lead up to RSOI, the returning class of 2020 was provided with a presentation on what they should expect during RSOI. This addressed the various stages in the process, the timelines, and the expectations in terms of preventative health measures, and provided a warm welcome back to the Academy. This level of preparation provided each returning Cadet with the confidence and assurance that the team at West Point held their health, safety, and personal wellbeing as a significant priority. This reinforced the mantra that Soldiers take care of one another. This also further emphasized the professionalism that the Academy has traditionally represented, but in this case, in a very real and tangible manner. It is recommended that a similar level of investment in the care and well-being of each Cadet be replicated at public universities or private colleges.

Finally, leadership was on site, and conducted in person supervision throughout the entire five-day RSOI period. This will continue in subsequent phases of RSOI. This was a leadership intensive evolution to maintain standards and ensure expectations were met. Leaders were personally invested in the RSOI process. It was clearly a priority to them, and this was conveyed to the Cadets (see Figure 2-15). As a result, the RSOI process went smoothly and progressed effectively and efficiently.



Figure 2-15. The Army Chief of Staff, the West Point Superintendent, and Two USMA Class of 2020 Graduates Socially Distancing during the Graduation Banquet

CHAPTER 3

Graduation Planning and Preparations

Planning and Coordination

The U.S. Military Academy (USMA), like other public universities and colleges, recognized how difficult it would be to conduct a normal graduation ceremony during the coronavirus pandemic. West Point graduations are an Academy tradition. It is an important moment Cadets' lives, as they celebrate the achievement of earning a bachelor's degree while simultaneously undergoing the rigors of military training in the disciplined and structured environment that is part of the West Point experience. Although it is definitely a proud achievement, it also marks the end of an important chapter in a Cadet's life. It also signifies a new beginning, that of a newly commissioned officer.

There was very little precedent for how to conduct a graduation concurrent with a national health pandemic. The U.S. Air Force Academy conducted the graduation ceremony for their senior class on Saturday, 18 April 2020. This is a full month earlier than usual. The Air Force Academy conducted a socially distanced graduation ceremony with chairs spaced apart in keeping with the preventative health guidance published at the time. The guest speaker for their graduation was the Vice President Mike Pence.

The U.S. Naval Academy conducted in-person socially distanced commissioning ceremonies by 210-midshipmen cohorts conducted over five days on 12, 14, 16, 18, and 20 May 2020. It then conducted a virtual graduation ceremony on 22 May. The virtual graduation ceremony included pre-recorded remarks made to the class by the Secretary of Defense, Secretary Dr. Mark T. Esper.

As mentioned earlier, while planning the COVID-19 response campaign plan, USMA also planned for a graduation ceremony. The exact nature of what the ceremony might look like was not well known in late March. However, the aspiration was to conduct a live graduation ceremony. Driving planning was a mid-April announcement by the President of the U.S., President Donald Trump, indicating that he would attend the USMA graduation at West Point. Additionally, there was interest expressed by parents of the graduating class and West Point alumni to conduct a physical graduation ceremony.

Once the USMA COVID-19 response campaign plan was completed, and lines of operation were complete, the USMA G-3 took the lead for the planning team that developed the fragmentary order (FRAGORD) for the graduation. How to conduct a graduation ceremony while simultaneously maintaining the necessary COVID-19 preventative health measures was factored into planning. The bottom line of planning was to conduct a ceremony while upholding the West Point graduation traditions.

Selecting a Venue that Best Supported Preventative Health Measures

In recent era, West Point has conducted the annual graduation ceremony at the Michie Stadium, located on the Academy grounds (See Figure 3-1). This location facilitated the attendance of

many family and friends of the graduating Cadets. It also contained the necessary support requirements needed to host such a large event. But early in planning, members of the engineering department discovered that the field was too small to host the full graduating class, the dais for distinguished guests and VIPs, and the West Point band on the same playing field. Measurements were made using computer software, which conducted the same measurements for alternative venues on the Academy grounds. As a result, the Plain, the parade field in front of Washington and Eisenhower Halls, was determined to be of adequate size to host the graduation ceremony. Due to social distancing requirements, the decision was made to change the venue of the graduation from the 38,000-seat Michie Stadium to the 40-acre Plain. This was not the first time the Plain had hosted a graduation ceremony. The only other time the Plain had been used for graduation was in 1977 (See Figure 3-2). Judging by black and white pictures of the event, that ceremony was not socially distanced.



Figure 3-1. 2017 USMA Graduation in Michie Stadium

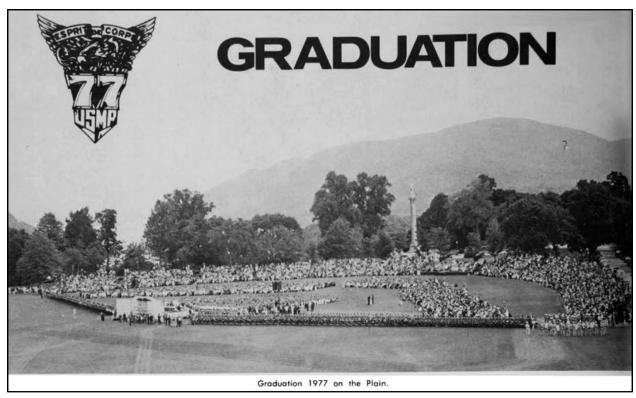


Figure 3-2. 1977 USMA Graduation on the Plain

For comparison, see Figure 3-3 below, taken from the roof of the new library, that provides a bird's eye view of the Plain during graduation preparations.

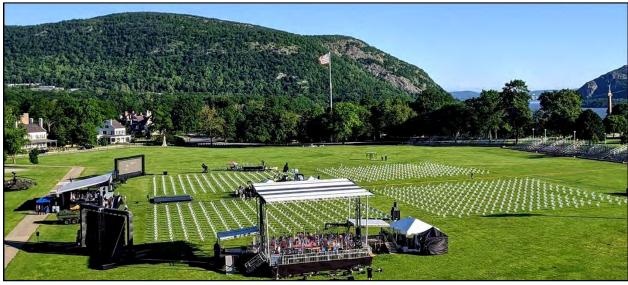


Figure 3-3. Graduation Ceremony Preparations on the Plain

With the location for the 2020 graduation approved, planning proceeded in similar manner as most any other year, with one exception. Would USMA also host parents at this unique graduation? That decision was not made early in the planning, as the Academy awaited more accurate indications of pandemic nearer to the day of the event. However, as graduation day

approached, health protection conditions remained unchanged. In keeping with higher headquarters directives, national, state, and county health guidance, and based upon recommendations from preventative health experts within Keller Army Community Hospital (KACH), the mask requirements would also be enforced where practical during the ceremony (See Figure 3-4).



Figure 3-4. USMA Class of 2020 Wearing Masks as they March onto the Plain during the Opening Portion of the Graduation Ceremony, because it was not Possible to Ensure Social Distancing

Unlike previous graduations, friends and families of the graduating class witnessed the event virtually. The ceremony, while bittersweet without the participation of celebrating parents and family members, still maintained the pomp and circumstance and traditions of past graduations (See Figure 3-5). Changes, including social distancing measures and masks, were readily apparent.



Figure 3-5. Newly Commissioned 2nd Lieutenants from the USMA Class of 2020
Toss their Covers

The amount of detailed and thorough planning the graduation planning team put into this event was noteworthy. Also commendable were the contributions from within the various academic disciplines that enabled accurate measurements to be gathered, which contributed significantly to the recommendation to change the graduation venue. As a result, the Academy leadership were able to make informed decisions, and not rush to judgement based upon imperfect or incomplete information.

It is recommended that USMA retain the planning products, published plans, and coordination efforts for the record. These supported the shift of the graduation from Michie Stadium to the Plain, and this level of detailed planning could be needed again in the future. It is helpful to have a planning precedent and a viable alternate location to use to drive planning and coordination for a professionally polished graduation ceremony.

CHAPTER 4

Building and Sustaining Medical Capacity

The Keller Army Community Hospital (KACH) is a tenant organization located aboard the West Point military installation, and serves the medical needs for the Academy, military staff and faculty, and retired beneficiaries within the local area. The mission of the hospital is to provide high-quality, compassionate, patient-centered healthcare for the West Point community while optimizing the medical readiness of the force and enhancing the well-being of all they serve. The vision of the hospital is to transform health services through innovation, excellence, and efficiency—small hospital, big results. In response to the COVID-19 health crisis, KACH transformed their health services through innovation in order to meet the additional anticipated health services, for which the hospital had not previously been equipped nor manned to provide.

Planning

As the U.S. Military Academy (USMA), garrison, and KACH staffs initiated planning in late March, one of the primary concerns addressed by health planners was the potential for the crisis to exceed the capacity of the other Hudson Valley hospitals, many of which handled increased levels of medical care beyond that which KACH has the capability to provide. For instance, the KACH did not have an intensive care unit (ICU) capability to provide care to serious COVID-19 patients. Additionally, the hospital did not have ICU trained doctors and nurses resident to the facility. Any staff that did have those certifications had obtained them through previous experiences. KACH did not have an established isolation ward to treat COVID-19 patients while at the same time protecting other staff and patients located elsewhere within the hospital. Lastly, KACH did not have the capability and capacity to conduct COVID-19 testing on a limited emergency room basis nor on the larger scale needed to conduct mass testing for the Corps of Cadets. Addressing these limitations was the focus of planning, coordination, and implementing change for the KACH leadership and staff.

KACH focuses the preponderance of its care capacity on providing routine medical services. It is equipped to provide primary care, physical exams, and clinical services (audiology, ophthalmology, physical therapy, radiology, etc.). The surgical capability is weighed heavily towards addressing sports-related injuries and elective outpatient procedures. KACH maintains an emergency room capability to conduct initial stabilization of a patient prior to being transported to a higher-level care facility within the Hudson Valley area. KACH provides a high level of care in keeping with their capabilities and capacity for the West Point military installation.

As part of the "Protect the Force Line of Operation" planning, it was quickly recognized that KACH would need to leverage the emergency declaration in order to gain external assistance and support. Additionally, it was also determined that changes needed to be made to the internal footprint of the hospital in order to create a COVID-19 ward. Lastly, KACH would need to support the broader USMA strategic communications messaging to increase awareness and preventative health measures that individuals could take to mitigate the threat of contracting the virus. All of these supporting efforts would be completed in less than two months.

Facilities Engineering Support to Modify Existing Hospital Infrastructure for a COVID-19 Ward

The most difficult task to accomplish was converting a portion of the hospital physical footprint into a dedicated COVID-19 ward. This involved identifying spaces within the hospital to house this new ward, while still remaining isolated from other portions of the hospital. Back in 2018 the labor and delivery ward was closed at KACH. These spaces included six single-bed hospital rooms, a nursery, and a dedicated operating room (previously used to conduct caesarean sections). In coordination with the chief surgeon, facility engineers created a plan in which the former labor and delivery ward was converted into a COVID-19 ward. This involved creating the negative pressure ward necessary to prevent the airborne spread of the virus elsewhere within the hospital. Additionally, partitions needed to be built to separate the different rooms and create standoff between patients and nursing staff. Without an infectious disease ward, this in-extremis plan proved to be quite effective. In just over two weeks of facility improvements, the COVID-19 ward was in an operational capable status and had the capacity to house twelve COVID-19 patients at one time, if needed (See Figure 4-1). In addition to the 12 beds (eight positive COVID-19 and four negative COVID-19), KACH could surge to 60 beds by setting-up an additional 48 non-standard beds (seven stretchers, ten fold-out couches, and 31 litters). For the 48 contingency beds, there are 46 headwalls available in rooms on the 4th floor of the hospital. For the remaining two beds, portable oxygen cylinders could be used. KACH has a bulk oxygen tank that can hold 1.2 million liters of oxygen. On 9 April, KACH filled this tank in preparation for a worst-case scenario.



Figure 4-1. One of the Beds in the COVID-19 Ward at KACH

In addition to creating a dedicated COVID-19 ward, the hospital planning team also had to identify a "hot route" through which a COVID-19-positive patient could be transported from the emergency room entrance up to the COVID-19 ward. This was necessary to minimize the spread of the virus in other high-traffic areas within the facility. Also, the garrison emergency operations center (EOC) coordinated with local EOCs and monitored local community hospital ICU and ventilator capacity. The EOC also coordinated an evacuation plan between KACH, local commercial assets, the U.S. Naval Ship (USNS) Comfort and the Javits Center, regional military medial centers, the U.S. Transportation Command (TRANSCOM) Regulating and Command and Control Evacuation System (TRAC2ES), and 2D Aviation. The evacuation plan was based on distance from West Point, and included coordination with numerous hospitals in neighboring states.

Talent Management and Training

The other important limiting factor that impacted KACH's ability to treat seriously ill COVID-19 patients was the lack of an ICU with certified doctors and nurses. During steady-state operations pre-COVID-19, there was no requirement for an ICU capability within KACH. Although there is an emergency room capability to conduct initial triage and stabilization of a patient exhibiting serious cardiac or other equally life-threatening situation, KACH relied upon

the rapid transfer of those types of patients to a higher level of care location within the Hudson Valley. This was not the case with this pandemic. Creating an "ICU-like" capability proved complex but not impossible at KACH (See Figure 4-2). Manning an ICU with a fully trained and certified staff was the single limiting factor. To overcome this training and certification hurdle, KACH conducted a talent assessment in order to identify doctors and nurses that had prior ICU experience, training, and certifications. Having identified a small team from within their ranks, they then developed a training plan to bring others up to a level of competency needed to maintain a qualified 24-hour staff capacity within the COVID-19 ward when needed. Using the former nursery facility within the COVID-19 ward, team training was conducted on a "training dummy" using the equipment/instruments that would be necessary when conducting operations within the ICU. Initial impressions indicated that a few nurses were uncomfortable early on, largely driven by fear of the virus itself. However, as training continued, confidence and competence increased significantly. Trust in the personal protective equipment (PPE) (potentially worn for very long periods), familiarity with equipment, and confidence in their training increased. It was commented that many of the nurses and other staff that went through this training were quite pleased by the professional quality of the training. It must be understood, however, that this type of arrangement could only be possible using the emergency declaration. This did not constitute the formal training and certification standards necessary of an ICU, however, as an extremis model it was quite effective. It is important to note that Regional Health Command-Atlantic tasked two respiratory therapists within the region to augment the KACH COVID-19 ward staff. One came from Fort Jackson, and the other from Fort Eustis. These respiratory therapists trained the KACH staff on how to use the vents. KACH also hired a pulmonologist who is on-call, in the event KACH receives a high-acuity patient requiring a vent.



Figure 4-2. The ICU within the KACH COVID-19 Ward

Before the COVID-19 crisis, KACH had two ventilators on hand to facilitate patient transfers to a regional hospital. With a seven-patient COVID-19 ward, and based upon the information available at the time, this was not a sufficient ventilator capacity necessary to treat the projected numbers of COVID-19 patients expected in late March and on into April. To increase the numbers of on hand ventilators, the hospital could not rely upon shared ventilators from within the Hudson Valley community of hospitals, as their capacity was being significantly stressed at the time. To acquire additional ventilators, KACH coordinated with Regional Medical Command-Atlantic. This led to a total on hand capacity of 11 ventilators at KACH. This additional capacity afforded seven designated "ventilator beds" within the COVID-19 ward, two ventilators to continue to support patient transfers, and an additional two ventilators for use in an operating room or elsewhere as needed.

Coronavirus Testing Capability and Capacity

Medical testing capability was another area in which external support from higher echelons within the Army was necessary and requested. KACH and the USMA medical planner established coordination with the office of the Assistant Secretary of the Army for acquisition, logistics, and technology. Through this process, KACH was able to procure two BioFire Film Array single sample COVID-19 analyzers, and two GeneXpert XVI multiple sample analyzers (See Figure 4-3). The BioFire units are made by bioMérieux and the GeneXpert units are made by Cepheid. All four of these systems were set up within the KACH climate-controlled laboratory facility. Although all four units were potentially mobile, to abide by laboratory certifications, they remained within the KACH laboratory at all times. Testing capacity for each BioFire Film Array unit was one sample per hour. Both systems were used to test patients that arrived individually at the emergency room complaining of symptoms of COVID-19, or those who had been in close proximity to others that were known to be COVID-19 positive. Both GeneXpert XVI units were employed during large batch testing, as was the case during the reception, staging, onward movement, and integration (RSOI) of the class of 2020. Each unit could process 16 samples at one time at 45-50 minutes per batch. Assuming both units were operational over an 8-hour day, the collective capacity was 256 samples per day. Surge capacity to test longer than 8-hour days relied upon the manning within the laboratory. Collection of samples were conducted at Camp Buckner, and then transported by vehicle to KACH for analysis. Day one of the process was designed to put the testing regime under a load in order to determine where efficiencies and process improvements could be made. Over the course of five days all second lieutenants (2LTs) were tested. West Point select fall athletics formed a sixth cohort of 129 Cadet athletes that arrived after the class of 2020 had completed RSOI. These athletes were also subject to 100 percent testing. With greater daily capacity required to process 100 percent of the remaining Cadets returning to West Point over the summer, along with the new Plebe class, the laboratory received two additional GeneXpert XVI systems in mid-June, which brings single-day testing capacity to over 500 samples per day.



Figure 4-3. Two GeneXpert XVI Test Analyzers Located within the KACH Laboratory

Medical Sustainment

PPE on-hand inventory and available stocks, despite stresses to the supply chain nationwide, was more than ample to support the needs of KACH. Masks, gloves, and protective outer layers were at adequate on-hand supply levels throughout the period of greatest crisis. Additionally, medical resupply did not reveal gaps in the medical supply chain that supported KACH. Face shields, used as an added protective barrier in front of the facemasks, were fabricated locally using academic expertise from West Point faculty. Lastly, the CrocsTM footwear company donated blue CrocsTM that were used by the COVID-19 ward in order to prevent cross contamination of the virus into other areas of the hospital via dirty shoes. The CrocsTM remained within the COVID-19 ward, and were segregated from the footwear worn by the medical staff. In short, PPE supply was not stressed, due in large part to a well-developed military health care supply system. Additionally, due to the lack of testing supplies on the commercial market, KACH had to rely on central Department of Defense distribution.

Support to other Army medical units was also a planning consideration that actually transitioned to execution for a short duration of time. Early in the pandemic Army medical capability was employed to establish an expeditionary hospital within the Javits Center in New York City. This facility was to serve as a surge medical capacity, similar to the hospital ship, USNS Comfort, within the city. Initial arrangements were made to provide support to the Javits Center in the form of medicine and other medical supplies. However, this was not a long-standing commitment, and it did not add significant stress to the medical supply system utilized by KACH.

Public Health Information Awareness

KACH was vital in communicating COVID-19 related awareness messaging to the local community. Crucial to effectively managing information related to COVID-19, KACH leveraged their preventative health expert, an active duty lieutenant colonel, to gather the most up-to-date information regarding the virus and disseminate it across multiple online platforms and social media in order to replace fear with facts. Many of the products developed from March through June are contained in the various examples, which can be found in Appendix E.

Lastly, KACH leveraged other Department of the Army health agency expertise external to the Academy. For instance, during RSOI, a risk communication specialist was brought in from the Army Public Health Planning Center located at Aberdeen Proving Ground, Maryland. This individual provided expertise, and guided the medical team and station attendants conducting RSOI so that the preventative health measures they were modeling and enforcing made sense, and were consistent with approved medical practices addressing infectious diseases and pandemics.

Best Practices and Lessons Learned

Talent Management. Similar to how talent was managed elsewhere aboard the Academy during OPERATION RESILIENT KNIGHT, KACH rapidly identified resident ICU experience and built a training team from those background skills and certifications. Additionally, KACH leveraged facilities engineers to rapidly convert a portion of the hospital into a negative vacuum COVID-19 ward in a relatively short amount of time. Using on-hand expertise enabled these rapid changes to occur in the interest of generating medical capacity to address the COVID-19 threat to the installation.

Using non-tradition supply pipelines. KACH built a COVID-19 testing capability from zero capacity to a capacity to conduct batch testing of over 250 samples per day—more if surged to do so. Leveraging the public health emergency declaration, KACH was able to procure much needed COVID-19 testing analyzers, which were crucial to testing 100 percent of the returning Cadets.



Figure 4-4. Two New Second Lieutenants from the USMA Class of 2020 Conducting "Socially Distanced" Physical Training

CHAPTER 5

Conclusions and the Way Forward

Based upon an understanding of the public health crisis caused by the COVID-19 global pandemic, and in keeping with national, state, and local infectious disease guidance, it is assessed that the U.S. Military Academy (USMA) acted appropriately and in the best interest of the Corps of Cadets, the faculty and staff of the Academy, and others residing on the West Point garrison. The actions taken by USMA leadership, driven by decision-quality information, likely prevented a larger health care crisis from taking place on the installation. Based upon concentrations of positive virus patients in Orange County, New York, and the large urban centers south of West Point, had the spread of COVID-19 been introduced to the Corps of Cadets, the impacts would have been significant. Dealing with a crisis of such magnitude would have stressed the medical capacity.

Lessons and Best Practices for West Point

There are implications from West Point's response to COVID-19 that need to influence near-and intermediate-term operations and actions at the Academy. First and foremost, it is recommended that USMA identifies an on-call deliberate planning capability to supplement the G-3/G-5 staff. Although the COVID-19 pandemic is a rare event, it stressed the Academy's organic ability to rapidly pull together a planning team, and built on strong subject matter expertise and planning talent, using a recognized doctrinal deliberate planning process in a time-constrained environment. West Point leadership was being asked questions early in the crisis for which the initial planning was a few steps behind being able to provide quality recommendations and advice. The all-hands ad hoc assembly of the planning team in the beginning was commendable. Additionally, the willingness for many officers to pitch in where needed and assist as their experience and training indicated was truly superb. It was this "fighting spirit" that enabled the team to gel very early on and coalesce under the able leadership found within the governance structure of USMA. Understanding the depth and breadth of expertise (planning and academic disciplines) found at the Academy, it is recommended that a formalized structure be developed, perhaps in the form of a Superintendent's Strategic Initiatives Group, composed of planning and subject matter expertise from across the Academy and garrison staff. This group needs to operate under a charter that supports the needs of the Superintendent in times of crisis, which demands a more deliberate planning approach to solve unstructured complex problems. It is not suggested that this team be a permanent body appended to the G-3/G-5, but rather a capability that can be drawn upon as needed.

Army trainers must make deliberate planning efforts to identify facilities, resources, and talent that can respond to a pandemic. West Point has the training areas to ensure space was provided during reception, staging, onward movement, and integration (RSOI) to conduct testing without risking the entire installation. Facilities on base were rapidly transformed and manned as quarantine and isolation barracks. An "all hands" approach as a response to a public health emergency is necessary to safeguard training units. Army training commands should assess their

personnel for emergency and crisis management planning experience, as well as additional modeling and information management skills. These skills will provide commands with a nucleus of specialists around which they can form a response cell.

100 percent of the returning graduating class of 2020 were tested for COVID-19. Because of the relatively young age of the Cadet population, it is very likely that most positive cases will be asymptomatic or have none of the indicators normally associated with COVID-19. For those who test positive or indicate symptoms, the manner by which West Point continues to conduct quarantine/isolation needs to be reviewed by a team of medical experts. It is only a matter of time until a Cadet, feeling isolated and unable to identify constructive methods towards dealing with the loneliness of quarantine or isolation, could be driven to self-injure or worse. This potential needs to be mitigated as best as possible. This has implications across the Army total force as well.

The concept of cohorting, and the controlled monitoring of small groups of people in order to limit the spread of outbreak (if outbreak occured), is something that could be useful to other military organizations and higher education institutions. The continued implementation of non-pharmaceutical interventions (NPIs) was the foundation of everything the Academy did, in addition to limiting and controlling group size and activity as much as possible while Cadets trained. Additionally, the Cadet population was cohorted according to class, barracks, company, summer detail, etc.

Talent management has repeatedly been cited as a best practice used by West Point during the pandemic response. Although this is true, it came with a cost. The Academy tapped into the various academic disciplines to support planning and enable informed decision-making. During initial planning, all former battalion/brigade operations officers and School of Advanced Military Studies (SAMS) graduates were used to serve as the military decision-making process (MDMP) "engine" during planning—their expertise was quite valuable. The systems engineers from the engineering department were crucial during graduation planning and preparations. Adjutant general specialists operated the aerial port of debarkation (APOD) control center at Newark International Airport. Other academic disciplines assisted in developing models used to support planning. There are too many positive examples to list. In short, many areas of expertise pitched in to make this process go smoothly. However, once class is restored to resident in-classroom learning, and Army training is reinvigorated by the Department of Military Instruction, there will not be the pool of surge personnel capacity to manage RSOI from a whole of enterprise perspective. This needs to be understood and planned for.

The USMA G-6 migrated the campus to Microsoft (MS) 365 and MS Teams over a year ago. This was conducted to bring the Academy up to comparable levels of information technology (IT) interoperability with like academic institutions. This proved quite fortuitous. The Academy leveraged MS Teams to enable mission command/command and control quite effectively during the pandemic. Additionally, MS Teams was used to facilitate the online learning environment supporting the academic program during the spring semester. Furthermore, the G-5 leveraged data collection via online surveys of the Cadets, and could display that data in near real time using MS Teams. The impressions of MS Teams from across the enterprise are highly favorable.

It is very doubtful USMA could have done this using Defense Collaboration Services (DCS) Connect, Sharepoint, or Zoom. MS Teams was a game changer that needs to be retained at West Point and expanded elsewhere across the Army.

The COVID-19 modeling development efforts were quite impressive. This team of academic experts used real-world data (ex. USAFacts.org, John Hopkins University, Washington Institute for Health Metrics and Evaluation [IHME], Los Alamos Lab, and the Youyang Gu [Massachusetts Institute of Technology] data sets) to build models that were able to forecast the extent of the virus. The efforts of this team need to continue to be developed and refined. The value of their models needs to continue to be assessed. Their models are of tremendous value, not just to the Army, but also to other federal and state health agencies. The quality of their work remains relevant to the ongoing fight against COVID-19.

West Point transitioned from resident studies to distance/online education fairly seamlessly. Leveraging familiarity with MS Teams, Blackboard, and Canvas, the process of transitioning to 100 percent online distance education took days and not weeks. The biggest problem was gaining the permissions to use online textbooks versus the hard copies that the Cadets normally use. However, this hurdle was rapidly overcome. The process of shifting to online education was complete four days after the end of spring break, while retaining the A-F grading criteria/standards. Based upon the success of West Point's transition, the Academy needs to participate in future academic forums with other universities and colleges in order to explore best practices for conducting distributed learning. There are also online education efficiencies that West Point identified, which can be used at other resident level Army education and training commands.

Numerous officers lamented the many missed opportunities and the difficulty in conducting character and leadership development remotely. It is recommended that West Point conduct a focus group composed of a cross-functional team to explore how best to conduct leadership development from online/distributed learning platforms. This is an opportunity to identify "how to lead in a distributed environment." With the proliferation of collaboration tools for planning, coordination, and management of projects, Cadets of the future will become officers, and will need to continue to inspire and lead outside of traditional face-to-face leadership situations. Developing the tools and curriculum to enable distributed remote leadership in the future needs to start now.

Recommendations for Civilian Graduate Education and Public Secondary Education Venues

To increase success during the response to COVID-19, USMA benefited from many facets that civilian education institutions would not necessarily have at their disposal. Cadets at USMA have a chain of command and follow orders or receive punitive action. Other institutes of higher learning may find it difficult to implement rigid control measures on their populations in order to mitigate virus spread (such as the cohort method used at USMA). In light of the lack of control measures, in order to mitigate the risk of infecting other students, other institutions may need to

rely more heavily on distributed learning tools (i.e. Blackboard, MS Teams, Zoom, etc.), or more frequent and more responsive testing touchpoints.

From the onset of the crisis, the Office of Institutional Research was able to devise a method of surveying offsite Cadets daily for their health symptoms, financial status, locations, and other information that would help build a better understanding of the environment. This process had to undergo a legal review, so other institutions would have to conduct one as well. This goes back again to the command and control exercised over the corps, however, the surveys significantly improved the ability to assess Cadet wellness and the RSOI process, and enabled additions to the process that had not been foreseen. Going forward, institutions of higher education could put additional requirements into their admissions process and guarantees to safeguard/destroy the data collected from civilian students.

Additionally, the surveys also facilitate a comprehensive assessment strategy. Surveys have the potential to enable an in-progress review/assessment by Cadets, faculty, and staff to the Superintendent. This formalized assessment regimen helped the institution make in-stride adjustments and improvements. This process can also include feedback from other directorates and West Point partners units. Additionally, surveys help frame how USMA evaluates and assesses the effects of COVID-19 on the strategic plan (also known as the strategy and campaign plan).

Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities Implications

Recent events have placed a high demand for emergency and crisis response planning capabilities. Whether it takes the form of a pandemic reaction or some other defense support of civil authorities-related event, organizations may need to request or restructure planners into a bench ready to support emergent threats. This implication bleeds over into other doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P) implications as well.

To their great fortune, USMA transitioned from a .mil architecture to .edu. When the COVID-19 restrictions were put into place, the West Point IT department was able to integrate MS Teams smoothly due to this transition. Cadets that were on spring break and away from the Academy at the time COVID-19 restrictions were put in place were able to use MS Teams to complete coursework, surveys, and other graduation requirements. While nothing takes the place of "hands on" leadership training, additional distance learning procedures could provide needed space to safely conduct classwork.

APPENDIX A

Reception, Staging, Onward Movement, and Integration Supporting Products and Diagrams

The figure listed below was extracted from the U.S. Military Academy (USMA) OPERATION RESILIENT KNIGHT reception, staging, onward movement, and integration (RSOI) operation order (OPORD) brief planning product produced by the USMA G-3 planning team. This figure is designed to assist other planning efforts at different learning institutions, based upon the planning precedent established by USMA.

Date/Tir	ne		
Last Nar			
First Na	ne		
Last 4 S	SN		
Assessme	nt of Symptoms		
		Yes	No
1. Cough			
	ess of breath or difficulty breathing	F	a
	>100° F) record temp:		
4. Chills			
5. Muscle	pain (not exercise related)		
6. Sore th	roat		
7. New lo	ss of taste or smell		
*If YES to for evalua	any question, transport Service Memb tion	er to KACH	i ER/TRIAGE
Clearance	for Movement		
	Member cleared for transport to Buckner		
	questions regarding disposition, cont np Buckner Aid Station at: 845-938-xx		dical Provider
As of 12 May 2	2020		Approved by:

Figure A-1. RSOI Symptom Screening Form

Appendix B

Graduation Supporting Products

All figures listed below are extracted from the U.S. Military Academy (USMA) Graduation Ceremony Operation Order (OPORD) operational planning team (OPT) planning product produced by the USMA G-3 planning team. These figures are designed to amplify the description of planning and preparations described in Chapter 3. Additionally, these figures also serve to assist other planning efforts at other learning institutions, based upon the planning precedent established by USMA.

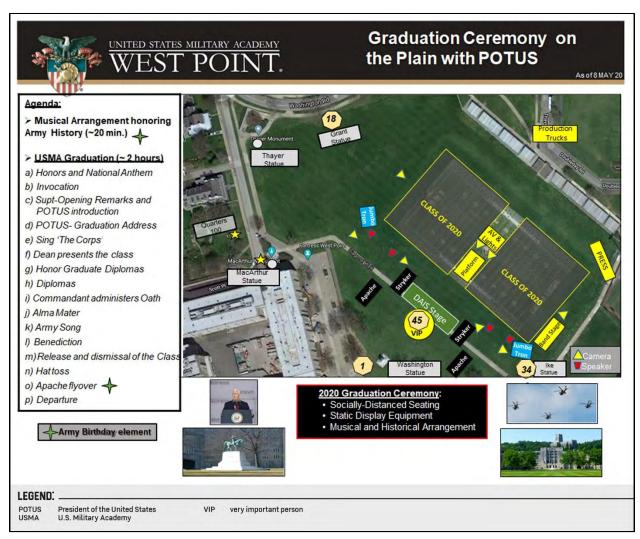


Figure B-1. Graduation Activities and Locations

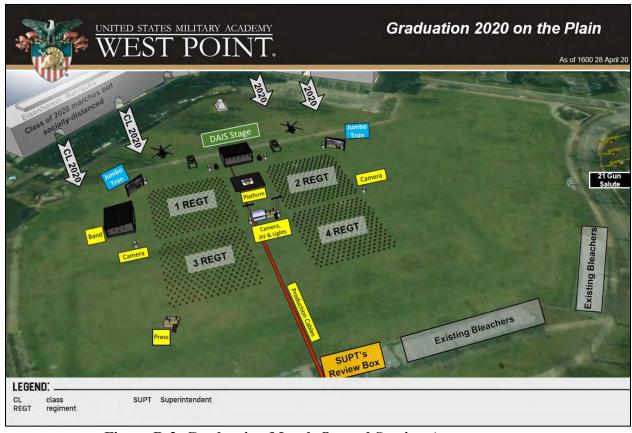


Figure B-2. Graduation March On and Seating Arrangements

APPENDIX C

Medical Capacity Supporting Products

The Keller Army Community Hospital (KACH) used both the Cepheid GeneXpert XVI and the bioMérieux BioFire film array coronavirus analyzers.* These testing machines were provided to West Point through the Assistant Secretary of the Army acquisitions, logistics, and technology. Below are the links to the corporate product websites for each system. Technical specifications are also available for each system.

*The listing of the commercial test analyzers listed above does not imply Department of Defense or Department of the Army endorsement of these companies nor their product line.

Cepheid, GeneXpert XVI system: https://www.cepheid.com/en_US/systems/GeneXpert-Family-of-Systems/GeneXpert-System

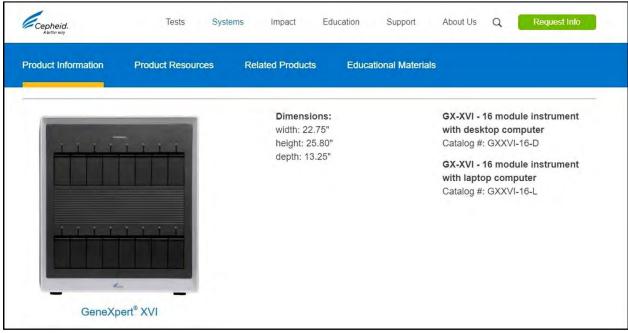


Figure C-1. Screenshot of the Cepheid GeneXpert XVI Product Information Page

bioMérieux BioFire film array system: https://www.biofiredx.com/products/filmarray/

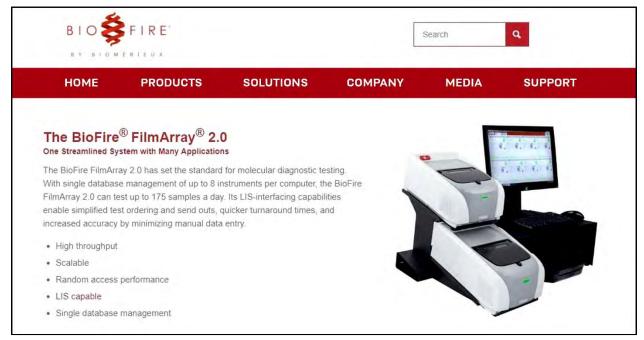


Figure C-2. Screenshot of the BioFire FilmArray 2.0 Product Information Page

For additional details on each system, it is recommended that customers contact the vendor directly or go through the appropriate organizational supply requisition team.

APPENDIX E

Coronavirus Public Information Awareness Products and Resources

The U.S. Military Academy (USMA), the West Point garrison, and Keller Army Community Hospital (KACH), in concert with external public health agencies, quickly built and published resources to increase awareness of the COVID-19 public health threat and to distribute preventative health measures for the Academy community at large. The West Point public affairs office (PAO), working with the G-5 engagements staff, and the KACH preventative medicine advisor, developed and produced professional products to heighten awareness and increase the ability for individual Soldiers, Department of the Army civilians, contractors, family members, and friends of the garrison community to protect themselves from the virus.

Supporting this broad communications efforts was the PAO and G-5 engagements, using their existing battle rhythm and the strategic communications working group, alongside their recurring weekly coordination efforts. Although both entities stayed within their stated span of responsibilities, they effectively managed the up and out messaging with higher headquarters and other strategic agencies, and the down and inward messaging that was more focused on the garrison community and Cadet population. Of prime importance was a balance between reporting quickly versus reporting accurately. To avoid misinforming the public and potentially creating a false sense of panic, getting the most accurate message out in a well-coordinated and timely manner was important. This team engaged with numerous large media outlets in New York City and across the nation. Their joint efforts at informing the public were a solid best practice.

This is not an all-inclusive list of resources. However, the following are the web resources most frequently utilized to provide virus related updates and publish information important to the greater West Point community.

Leading from the front, the USMA Superintendent often appeared in front of the camera and was a firm yet measured voice of assurance that USMA was doing everything within its means to protect the West Point community from COVID-19. This was an opportunity to explain how he was charting a way forward to defeat COVID-19 and continue the mission of the school. For an example see the Declaration of Public Health Emergency: https://youtu.be/O4D9ff_aeFo



Figure D-1. Screenshot of the USMA Superintendent Giving the Declaration of the Public Health Emergency

The Pointer View Installation Newspaper

The local installation newspaper, *The Pointer View*, was a popular resource to provide COVID-19 information to the garrison community and the local towns surrounding the installation. Available in print, and online (www.pointerview.com), this resource published numerous updates and ran stories that demonstrated how USMA was proactively handling the crisis. For an example, see Figure E-2, the front page of *The Pointer View* on May 28th, which described the reception, staging, onward movement, and integration (RSOI) process to return the class of 2020 to the Academy and prepare them for graduation. Find the full online version of this copy *The Pointer View* here: https://s3.amazonaws.com/usma-media/inline-

images/about/Public%20Affairs/pointer_view_archives/2020_pointer_view_archives/pointer_view_05282020.pdf



Figure D-2. Front Page of The Pointer View on May 28, 2020

U.S. Army Garrison West Point COVID-19 Response Community Playbook

U.S. Army Garrison West Point and KACH assembled a 49-page Community Playbook designed to enhance awareness of preventative health measures for the community to implement. It included a response flow chart, frequently used terms and definitions, social distancing and quarantine/isolation at home "dos and don'ts," and explained the procedures to take if one felt they were sick with the virus. This product, along with other COVID-19 health resources is available for download at: https://kach.amedd.army.mil/West-Point-COVID-19-INFO/

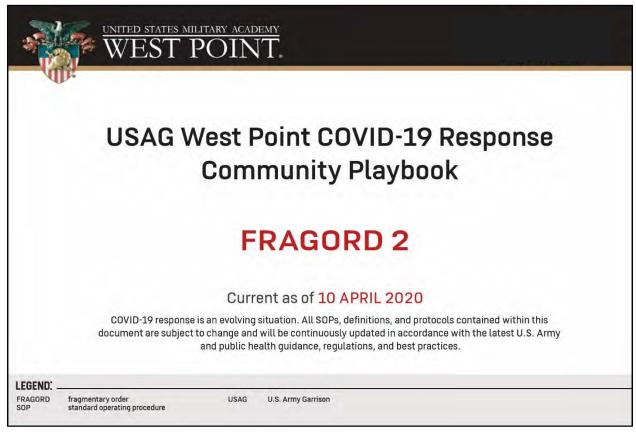


Figure D-3. First Page of the COVID-19 Community Playbook

The Keller Army Community Hospital COVID-19 Information Page

KACH developed its own list of resources within a page dedicated to COVID-19 related information. The above mentioned Community Playbook is included on this website. In addition to providing updated information on the Coronavirus health threat, it also publishes changes to critical services provided by KACH. The website can be reached here: https://kach.amedd.army.mil/West-Point-COVID-19-INFO/



Figure D-4. Screenshot of the KACH Website Homepage

West Point Coronavirus Guidance website

On the main West Point homepage (www.westpoint.edu) there is a link that takes the viewer to the West Point Coronavirus Guidance website. This page has updated information regarding the virus, and contains many helpful resources. Although in many cases there appears to be redundancy in the use of similar resources displayed across the different websites and other media, this was to ensure a wide push to get information out into the community of interest across many trusted portals. The coronavirus guidance page can be found here: https://www.west-point.edu/coronavirus



Figure D-5. The USMA Coronavirus Guidance Website, Including a Link to the West Point Garrison Town Hall, Located on Facebook

Also available on the West Point homepage is a link to The Pointer. This is an MS Teams portal to share information internally between faculty and staff and the Cadet populations. This ensured information was being shared across the many audiences that compose the West Point community.

West Point Garrison Town Hall

Like many U.S. Army Garrisons, West Point conducted regularly recurring Garrison Town Hall events on Facebook. This afforded an opportunity for the garrison commander and other guests to provide updates on the conditions of the health threat, disseminate public health information, and afford an opportunity for the garrison community to ask questions of the leadership. This was a well-attended virtual event. The West Point Garrison and Community Facebook page where these events are located can be found here: https://www.facebook.com/pg//USAGWestPoint/

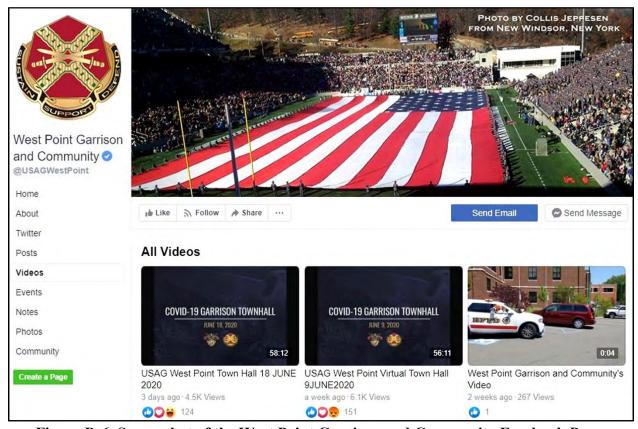


Figure D-6. Screenshot of the West Point Garrison and Community Facebook Page

Orange County Health Department Website

Numerous West Point COVID-19 related websites include a link to the Orange County Health Department. This is an additional resource that provides updated COVID-19 information within the county that surrounds West Point. The Orange County Health Department website can be found here: https://www.orangecountygov.com/1936/Coronavirus

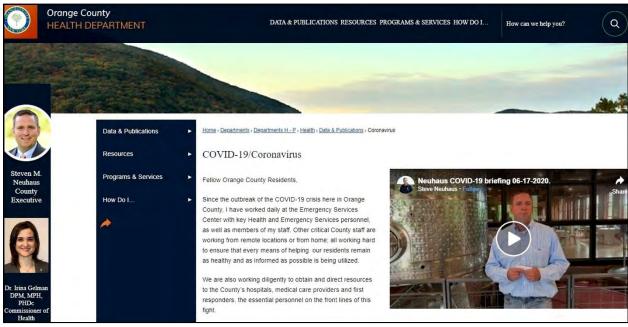


Figure D-7. Screenshot of the Orange County Health Department Website Home Page

APPENDIX F

Acronym List

2LT	second lieutenant
APOD	aerial port of debarkation
BTD	brigade tactical department
BUB	battlefield update brief
CALL	Center for Army Lessons Learned
CAAT	collection and analysis team
CST	combat strength training
DCS	Defense Collaboration Services
DMI	Department of Military Instruction
DOTMLPF-P	doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy
DTS	Defense Travel System
EOC	emergency operations center
EXORD	execute order
FEMA	Federal Emergency Management Agency
FORSCOM	U.S. Army Forces Command
FRAGORD	fragmentary order
HIPAA	Health Insurance Portability and Accountability Act
HIV	human immunodeficiency virus
HQDA	Headquarters, Department of the Army
ICU	intensive care unit
IHME	Institute for Health Metrics and Evaluation
IT	information technology
JFK	John F. Kennedy
KACH	Keller Army Community Hospital

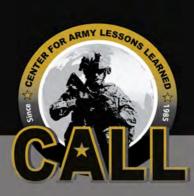
LOO	line of operation
LTG	lieutenant general
MDMP	military decision-making process
MRE	meal, ready to eat
MS	Microsoft
NAAT	nucleic acid amplification test
NCO	noncommissioned officer
NPI	non-pharmaceutical intervention
ODIA	Office of the Directorate for Intercollegiate Athletes
OIC	officer in charge
OIR	Office of Institutional Research
OPORD	operation order
OPT	operational planning team
OSINT	open source intelligence
PAT	personnel accountability team
POV	privately owned vehicle
PPE	personal protective equipment
PCS	permanent change of station
RSOI	reception, staging, onward movement, and integration
RTO	regimental tactical officer
SAMS	School of Advanced Military Studies
SME	subject matter expert
SPO	support operations
TDA	table of distribution and allowance
TMC	troop medical clinic
TMP	transportation motor pool
TRAC2ES	TRANSCON Regulating and Command and Control Evacuation System

TRADOC	U.S. Army Training and Doctrine Command
TRANSCON	U.S. Transportation Command
USAG	U.S. Army Garrison
USCC	U.S. Corps of Cadets
USMA	U.S. Military Academy
USMAPS	U.S. Military Academy Preparatory School
USNA	U.S. Naval Academy
USNS	U.S. Naval Ship
USO	United Service Organization

APPENDIX F

References

- 1. Army Regulation (AR) 150-1, Organization, Administration, and Operation, 04 MAR 2019
- 2. Declaration of Public Health Emergency for the U.S. Military Academy and the West Point Military Reservation, dated 26 March 2020
- 3. U.S. Army Garrison West Point COVID-19 Response Community Playbook. Available here: https://kach.amedd.army.mil/West-Point-COVID-19-INFO/



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