



**EPAC READINESS SUBCOMITTEE ENGINEERING BOOKLET
DEPLOYED ENGINEERS IN ACTION
COVID-19 SPECIAL EDITION**



December 2020



Dear EPAC,

The U.S. is facing a historic pandemic with COVID-19 which has impacted everyone's lives. In response to COVID, USPHS engineers have deployed and are assisting in various capacities throughout the nation at this hour of greatest need. To assist with recognizing and memorializing contributions by USPHS engineers, the Readiness Subcommittee is issuing a COVID-19 Special Edition of the Deployed Engineers Booklet. The booklet captures short stories and reflections of engineer officers serving on the frontlines of the COVID-19 epidemic. To assist with capturing stories and reflections, a questionnaire was circulated to all members of the engineering category requesting entries for inclusion in this special edition. What's captured in this booklet are entries as submitted by the officers.

The following officers are featured in our **COVID-19** Special Edition:

1. CDR Roxanne Adeuya, PhD, P.E., Food and Drug Administration (FDA)
2. LT Yvesna Blaise, Food and Drug Administration (FDA)
3. CDR Brian Bearden, MS, P.E., BCEE, Environmental Protection Agency (EPA)
4. CDR Sean Bush, P.E., Indian Health Service (IHS)
5. LT William Chang, Food and Drug Administration (FDA)
6. LCDR Gregory Bessette, Food and Drug Administration (FDA)
7. CAPT Gretchen Cowman, P.E. DrPH, National Institutes of Health (NIH)
8. CDR Tanya Davis, P.E., BCEE, Indian Health Service (IHS)
9. CDR Kurt Kesteloot, National Park Service (NPS)
10. LCDR Michael D. Gifford II, CSP, PMP, REHS, National Park Service (NPS)
11. LCDR Patric Klotzbuecher, Food and Drug Administration (FDA)
12. CDR Leo Gumapas (NIH), CDR James Coburn (FDA), LCDR Abbas Bandukwala (FDA), LCDR David Dar (FDA)
13. CDR Leo Gumapas, National Institutes of Health (NIH)
14. LCDR Timothy Martin, PhD, EIT, Food and Drug Administration (FDA)
15. CDR Kris Neset, P.E., MSM, Navajo Nation Water Access Team (CDC/IHS)
16. LT Chaolong Qi, PhD, P.E., Centers for Disease Control and Prevention (CDC)
17. LT Kevin Remley, P.E., Indian Health Service (IHS)
18. CDR Joshua Sims, MS, P.E., Indian Health Service (IHS)
19. LCDR Michael Shahan, P.E., Centers for Disease Control and Prevention (CDC)
20. LCDR Travis Spaeth, MS, P.E., Environmental Protection Agency (EPA)
21. LCDR Michael Sweeney, Food and Drug Administration (FDA)
22. CDR Sadaf Toor, MS, Food and Drug Administration (FDA)
23. LT Kayla DeVault Wendt, E.I., Indian Health Service (IHS)

Our subcommittee is hopeful that EPAC can share these stories with other officers in EPAC as well as new call to active duty officers so that they can have insights in terms of what deployments can look like and what to prepare for when they go on deployments.



We also want to acknowledge LCDR George K Ngatha, LCDR Stephen Souza and LT Katherine Drew for their tireless dedication in putting together this special edition of the Deployed Engineers Booklet.

Thank you.

Sincerely,

Frank

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CDR Roxanne Adeuya, PhD, PE, Food and Drug Administration (FDA)

Name of Deployment for 2020 New York City Strike Team 1(ST-1 NYC)

Deployment Team: New York City Strike Team 1(ST-1 NYC)

1. What is your current assignment in USPHS? Branch Director, Human and Animal Food Foreign Inspection Planning Branch 2

2. What was the mission of your deployment or focus of your COVID-19-related activities?
To stand up an FMS in NYC for providing patient care

3. What was your understanding of your role before deployment? Was that your role during your deployment?
My role was to serve in whatever capacity PHS needed and wherever the need existed. When I arrived in NYC, I was assigned to the Logistics team.

4. What would you consider your major accomplishment?
Ensuring positive interactions with other services and government agencies for meeting logistics operation challenges and patient care supply needs. For the first 10 days I was initially responsible for ordering, managing stock and distributing supplies on the 12-hour day shift. Additional PHS Officers were added to our team on April 7, 2020 and my duties were reduced to being responsible for ordering medical, equipment and PPE supplies based on identified needs and burn rates. Before the end of my deployment, I trained five HHS ASPR Logistics staff on the use of DOD's Defense Logistics Agency System for ordering supplies.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?
The first 10 days was very challenging physical and mentally. We had four Logistics Officers working 12-hour shifts, with two on day and two at night. We worked long hours, alongside sister services, federal and state agencies. I was assigned to the day shift and spent my time in the warehouse distributing supplies, accepting orders, organizing, and accounting for supplies. One additional challenge was making sure that what was being communicated was understood as intended. With so many entities at play with unique forms of communication, we had to learn how to work in sync to ensure effective communication across all groups.

6. What are some of your best memories from the experience?
The comradery I felt working with my fellow PHS Officers was the most valuable experience. I learned a lot from my Logistics Chief CAPT Burnham and the HHS ASPR Staff.



7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Mental and physical health is extremely important. Officers should be mindful to eat well, sleep well, and laugh a lot. We need to be grateful for the things we have and know that we are fortunate to be able to help others and inspire hope. Also, be flexible in taking on new roles and in assisting to fill operational gaps.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

You need to give yourself time to reflect on the entire experience and readjust to family/personal life. I went for long walks each day and spent time caring for myself both physically and emotionally within the first few weeks post deployment. I also stayed in contact with members of my team that I develop friendships with during the deployment.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Learn to take life a little bit easier. Learn to attack tasks one bit at a time and not become overwhelmed by the magnitude of the problem. Do the best you can in this moment and the next; tomorrow will take care of itself.



LT Yvesna Blaise, Food and Drug Administration (FDA)

Deployment Team: Deployment Team or Tier Name: Travis Air Force Base as a member of the Service Access Team (SA).

OPDIV: your agency: FDA

1. What is your current assignment in USPHS?

Consumer Safety Officer @ OPQO Pharma Division I

2. What was the mission of your deployment or focus of your COVID-19-related activities?

During this deployment, I was a part of the Service Access Team at Travis Air Force Base in California, one of the Federal quarantine locations set up to take in guests from the Grand Princess Cruise Line. During the deployment, I would contact and monitor patients for COVID-19 related symptoms and conduct welfare/wellness checks on a daily basis.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

From my understanding, I was deployed to support COVID-19 operations with US Public Health Service at Travis AFB in Vacaville, CA. My deployment was from March 10 -26, 2020. Travis AFB was one of the quarantine locations set up to take guests from the Grand Princess Cruise line that was just offshore in the Bay Area in Northern California. Travis AFB as well as Miramar and Dobbins Air Force Base in Marietta, Georgia was set up to take in passengers from the Grand Princess crew ship. The quarantine passengers at Travis AFB started on March 9th, 2020 and over the next several days they accepted more guests at Travis AFB. There were four locations set up to housed guests. My role was to monitor the 103 cruise ship passengers assigned to me for COVID related symptoms. I also would contact the cruise ship guest periodically by conducting welfare/ wellness checks to ensure they had their prescriptions to just stay as healthy and they remain comfortable as possible while quarantine at the base.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

During the deployment I did not have any downtime for the 16 days I was there. We worked 12-hour shifts each day. It was a humbling experience and I am happy to have been a part of this opportunity alongside other PHS officers and HHS agencies.

6. What are some of your best memories from the experience?

Networking and meeting other PHS officers. Working with the travelers from the cruise ship was a great experience that I will never forget.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

My post deployment experience was a smooth transition back to my duty station.



CDR Brian Bearden, MS, PE, BCEE, Environmental Protection Agency (EPA)

Name of Deployment for 2020 COVID-19

Deployment Team: Regional Incident Support Team (RIST) 9

Environmental Protection Agency



Photo is of **CDR Eduardo Cua** (ASPR R9 Regional Emergency Coordinator) fixing **CDR Brian Bearden's** flawed home haircut in front of the **FEMA Distribution Center in Guam, April 16, 2020**. Photo was taken by **Robin Bishop, ASPR R9 Federal Medical Station (FMS) Subject Matter Expert (SME)**.

1. What is your current assignment in USPHS?

Chief Engineer / Water Division Director for the Guam Environmental Protection Agency

2. What was the mission of your deployment or focus of your COVID-19-related activities?

First deployment: From March 20 to March 26. I was provided to the Territorial Public Health Agency (Guam Department of Public Health and Social Services - DPHSS) at the request of a



CDC officer assigned to Guam (LCDR Thane Hancock), and with the approval of my local (Territorial) supervisor. This was a local/agency deployment. My mission was to stand up the Territory's home quarantine program for close contacts of confirmed COVID-19 cases. This ran for 6 days before I was officially deployed by USPHS to a different response role.

Second Deployment: From March 27 to May 15. Official USPHS deployment through RIST 9, as LNO (liaison officer) attached to the FEMA IMAT-A team for Guam. As the only HHS representative working in Guam for most of the deployment, the role was really a bit beyond LNO and more along the lines of Agency Representative. Per the Incident Action Plan, I operated as a partner to and at the same level of authority as the FEMA IMAT-A Division Supervisor for Guam.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

First deployment: I really did not know what to expect. I was asked to step in and help organize the Territory's home quarantine program and perhaps lead it (which did in fact happen). It was a high stress environment and gave real meaning to the phrase "drinking from the fire hose". Although I did not really know how to approach the situation, no one else did, either. And as it turned out, the logical patterns of thinking and organization that engineers are trained to develop were very well suited to the task. By the end of this first deployment, just 6 days into it, I was supervising eight nurses and social workers, in addition to a dedicated data and records management section that supported both my quarantine program and the separate home isolation program.

For the second deployment, I was expecting to serve as liaison (LNO) but quickly realized that I would be on my own as the sole HHS representative for Guam in the federal response, and the position became more like that of a Regional Emergency Coordinator (REC) or Agency Representative. It took me a while to realize that this role was equivalent in level to the FEMA IMAT-A Division Supervisor, and that I was being looked to not just as a liaison, but as a leader within the response in Guam.

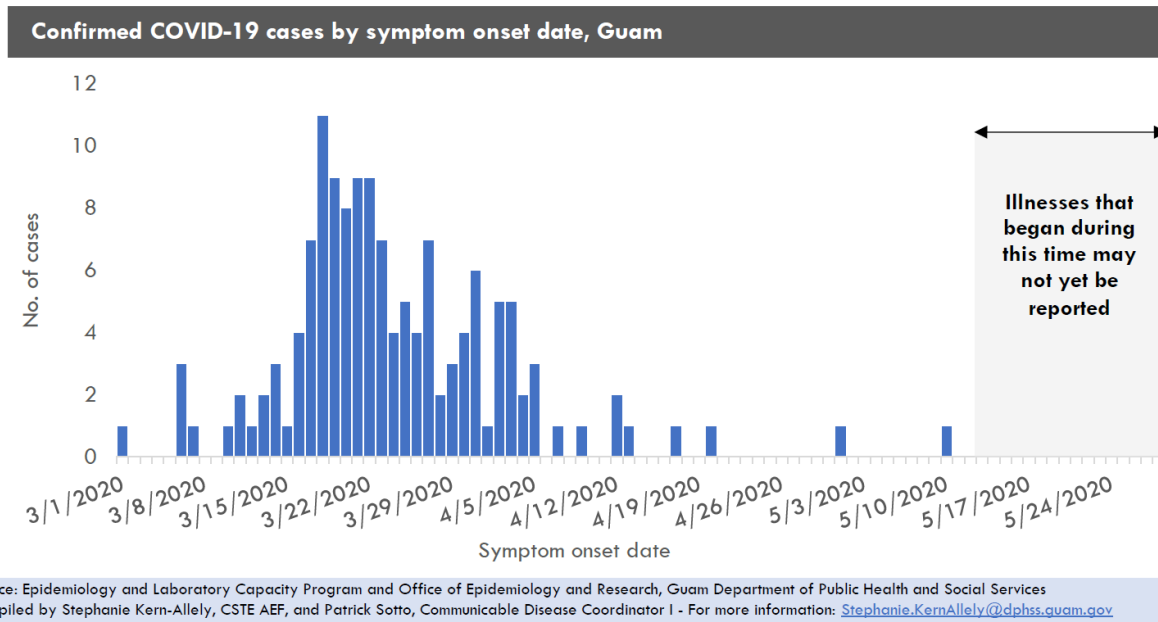
4. What would you consider your major accomplishment?

First deployment: Standing up a quarantine program from scratch. This is something that I will never forget, and certainly never expected to do as part of an engineering career. Although I did start with some draft documents that had been prepared for the quarantine operation by CDC staff, I had no choice but to develop many more including call scripts, daily patient call logs, and the overall tracking system for the program. And then to train the staff and work out the kinks as we moved along. We had over 100 people in the home quarantine program when I moved to my official response role after 6 days, and it grew to well over 1,000 people after I left. I trained one of the nurses

I initially supervised as my replacement, and even though she improved many aspects of the program as it grew, she still used the basic records and systems that I developed at the start of the program. In the end, I know that the home quarantine program played a big part in Guam's very successful handling of the first wave of the virus (see graphic below from 5/28/20).



Second deployment: My deployment as LNO / Agency Representative covered so many different lines of effort that I can't really pinpoint a single accomplishment that stands out. However, I would say that one of the ways in which I feel like I was most useful was in learning the supply chain for the various COVID-19 testing systems and getting ahead of requests to ensure that testing supplies never ran out for Guam. At times this required some unorthodox means, for example going through my personal CDC contact in Guam to get four of the last five boxes of RNA extraction kits available for all of the US shipped to Guam from a CDC lab in Virginia.





later, the Territorial incident managers were still making changes to the final locations for alternative care sites.

6. What are some of your best memories from the experience?

By far my best memories of the experience were working with the Territory's Public Health department and the Department of Education nurses who were assigned to my quarantine program. There was a lot of fear and anxiety at the start of the outbreak, and to see this group of people step up to the task and not only overcome their fears but to develop a deep sense of comradery and esprit de corps was something I have very rarely experienced, if ever.

After that, my next best memories would be of working side by side with the FEMA IMAT-A Division Supervisor for the first two weeks of my federal deployment, when we were the only federal responders at the Territory EOC until others arrived and/or were released from quarantine. We assumed at the time that no additional federal help would arrive, and that we would be on our own. Although the thought was definitely anxiety-inducing, it forged a tighter bond between us as a team, which turned into a friendship that has continued since I demobilized.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Engineers have a lot to offer to this response. The logical and organized way in which we approach problems is of great benefit and fits well into numerous response roles, even to a pandemic. It does not require medical or even public health knowledge and experience to be useful.

The USPHS uniform is much more visible now and people look to us for knowledge and leadership in this crisis. I was surprised at the number of times I was asked for my advice or opinion regarding safe work procedures and other response activities, even from people who know me well as an engineer. Similarly, I was almost always asked to give an opening or closing statement at every EOC meeting I attended and was frequently asked to report out early at the Territorial Public Health Incident Command meetings. It pays off to keep up to date on sitreps, CDC guidance, and news related to the pandemic so that you are ready for inquiries and requests for updates or highlights. It also pays to know who or where to refer people to for information that you can't responsibly provide. I always reminded every person who asked for my opinion that I am an engineer, but it did not seem to matter much because they saw me as a USPHS officer first.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

I had some trouble returning to my old job, primarily because the COVID response was such an intense and full-time experience. I was deployed for almost 60 days in total, which added to that. It took some time before I was able to clear my mind enough of COVID information to be able to focus on my regular job. Taking the post-deployment respite absence leave was helpful in coming down off the deployment mindset.



9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Get out there and get to know your fellow USPHS officers! Participate in your local COA, or if there isn't one, reach out to your local officers and get together with them frequently. Try especially to get connected to your local CDC officers, if there are any. It was through my CDC USPHS connection with LCDR Thane Hancock, MD, that I was initially brought into the response, and this connection proved invaluable throughout the response.

Also, as USPHS engineers we should all try to improve our knowledge of basic public health principles. People really do place expectations on us because of the uniform. While it's unlikely that any practicing engineer will know about every scenario they may encounter, a firm grasp of where to find such information should be expected of us (for example a good working knowledge of CDC resources), as well as a basic understanding of the ways in which diseases spread and how those principles inform decision making in a crisis. There are many free resources available that can provide such knowledge, and formal education in the basics, such as through a graduate certificate program, can be very beneficial.



CDR Sean Bush, P.E., Indian Health Service (IHS)

1. What is your current assignment in USPHS?

Managing an engineering office and serving as a design & project engineer.

2. What was the mission of your deployment or focus of your COVID-19-related activities?

I volunteered to serve as a Contracting Officer's Representative for the ASPR Supply Chain Stabilization Task Force in support of procuring ventilators for the Strategic National Stockpile.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

I did not know what my role would be or what the work would entail other than they put out a call for COR level 3. When they reached out with an MOA transferring me to ASPR it was for a 90 day detail. That was extended another 90 days.

4. What would you consider your major accomplishment?

Managing a \$552 million-dollar contract was a first for me. Ensuring that all shipments and payments occur on time was the focus of my efforts.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

There are many different priorities for the contracting officers and ensuring that my project received the attention it needed to make payment required a lot of follow through.

6. What are some of your best memories from the experience?

Seeing the numbers of ventilators going to the warehouses.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

You never know where you will fit into the big picture and it can be interesting to just raise your hand and volunteer –even if you don't know what you're volunteering for.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

My work day will be reduced as my regular job is still here, but it is secondary to the detail to ASPR.



LT William Chang, Food and Drug Administration (FDA)

REFLECTIONS ON THE PANDEMIC

I remember learning about the US Public Health Service around the time Ebola was threatening our nation around 2014. I said to myself back then that I wanted to get involved with that service and join the Corps. I had to wait a couple more years for an opening in the engineer category. Fast forward to now, and that dream has been realized at a time this country is seeing its worst pandemic in 100 years.

I had joined the tier 1 NIST team in October 2018. January 2020 was on-call month, and in February we were told to be ready as stand by for NIST E. My team commander called me in early February expecting us to be deployed to either California or Texas to work with the quarantine teams repatriating Americans from China. I ended up going to Lackland AFB in San Antonio, TX. NIST had been developing me into an Admin & Finance Officer and I was assigned to that section, where I met LCDR Michael Gu, another engineer, who was the section chief. We were joined by CAPT Ruby Lerner, another member of NIST D. The three of us worked tirelessly to ensure daily accountability of the entire Incident Management Team (IMT). I kept track of everyone's hours and made daily reports of who on the IMT were arriving and departing. We ensured each person arriving was given hotel and car rental information as well as where to report in. For folks departing, we ensured they had their travel itinerary set, all health release forms, and travel expense forms. The IMT ran every day from 7:00AM to 7:00PM. When I first arrived, I saw that the repatriated Americans had already been at Lackland for a week. My initial thoughts were that this deployment would not be the full two weeks. Then on the 3rd day, the IMT was told that quarantined passengers on the cruise ship *Diamond Princess* in Japan were being sent to Lackland AFB. I concluded that my deployment was going for the full two weeks. When I think back to this time, I still had no idea that this pandemic could penetrate our borders because I remember watching SARS and MERS in the news cycle years ago, but they never hit the US. I even purchased Disney World tickets for the summer at the Lackland AFB ticket center on my spare time. When my deployment ended, I resumed my work at FDA, while the COVID pandemic was slowly moving into our borders.

When the President declared COVID a National Emergency, I remember watching on television Secretary Azar stand with Vice President Pence and Admiral Giroir, with about another 5 USPHS officers behind them. I remember the pride I had seeing our uniform at a Presidential press conference.

My local FDA office closed as a result of the NJ shut down. My time afterwards was spent with FDA on a special detail, working with the Center for Devices and Radiological Health (CDRH). I was assigned to work to review Emergency Use Authorization requests from manufacturers and suppliers trying to distribute the much-needed personal protective equipment of masks and



respirators. I worked on that detail from April to June, helping to ensure that our front-line health care workers had safe and effective masks and respirators.

By late May, I was called to deploy again directly from Commissioned Corps Headquarters, and that it would be for a full 30 days. I was happy when I learned that the deployment was to nearby Bergen Community College in Paramus, NJ, which was only about a 40-minute commute. Through my contacts at the New York Commissioned Officers Association, (a WhatsApp text chain actually) I was able to get in touch with an officer currently at the site, LCDR Melka Argaw. I drove up the next day to meet him at the site, and he went over the duties of being a Safety/Quality Control Officer. I was to replace him, and we reviewed his role working at the registration tent. He had been there for the last month and his job was to oversee the nurses/EMTs that collected information from patients while in their cars. Every form filled out was controlled and had to be reconciled with card numbers that each patient was given when they entered. All forms needed to be accounted for. My role was to ensure handwriting was neat, that form numbers matched up to the distributed cards, and that all personnel were working in a safe manner. While it was a 30-day deployment, the site only ran 4 days a week, and it was nice to be home on off days. I worked with another officer, CDR Stacy Shields, who was also on her 2nd deployment at the site. Towards the end of the deployment, the state of NJ was conducting tests at various locations around the state. They used supplies from our site, so inventory control became an additional duty. The state of NJ also needed personnel training for their mobile test sites, and I stepped in to fill that role. I developed training material and training forms to ensure consistent messaging and had trainees sign off for accountability.

Since being back from deployment, I've continued to work at various FDA roles since my office had not re-opened and inspections have not resumed. I've assisted in device recalls and database clean up projects, and I have even authored training material for new inspectors. The transition has been smooth.

I still imagine that I will be deployed again this year. The vaccine for COVID is not expected until 2021, and hurricane season is starting soon as well. I have a lot of pride in what the PHS is doing during this pandemic, and it never gets old seeing ADM Giroir holding a press conference next to the President.



LCDR Gregory Bessette, Food and Drug Administration (FDA)

Reflections on COVID-19 Deployment: April-May 2020

I deployed to FEMA's Regional Response Coordination Center in Denton Texas from April 17th to May 15th, 2020. My assignment was under HHS's Office of the Assistant Secretary for Preparedness and Response (ASPR), and I served as the HHS Liaison Officer at FEMA's Region 6 Headquarters assisting HHS and FEMA maintain visibility over the public health components of the mission. Region 6 includes Texas, Louisiana, Arkansas, Oklahoma, New Mexico, and all the tribal sovereign nations within these states. I worked directly with the ASPR's Regional Emergency Coordinators, the Federal Regional Health Administrator, FEMA's Regional Administrator; FEMA's OPS, LOGS, and Planning Section Chiefs; FEMA's Emergency Services Branch, DOD and National Guard representatives, and HHS's State and Tribal public health representatives.

There were a great deal of moving parts within our mission. My days were filled with many meetings, emails and phone calls. The meetings included daily regional and national level calls and video teleconferences; many of which I was an active participant. Most of our problems pertained to logistical issues such as the distribution of PPE, anti-viral drugs, testing supplies, and the deployment of various HHS and CDC teams. A lot of effort also went into data tracking, and trying to monitor the many statistical metrics, which was very challenging considering all the factors that one can consider in determining a variety of trends (i.e. trends in COVID cases, deaths, outbreaks, other diseases likely resulting for the virus, etc.). Typical areas of focus were our community-based testing sites, flare ups in nursing homes, prison populations, native American tribes, and meat packing plants. Towards the end of my time there, there was more discussion and planning for how to feed underserved populations, how to maintain food supply chains, how to handle the depopulation of various animal farms, and how to best prepare for potential continued economic decline.

I worked about 10 hours a day, and half days on Sunday. My job was to filter out the noise from all the meetings I attended and distinguish what was important to relay to HHS and to FEMA. During meetings I would brief out to both sides each day trying to capture and separate who needed what information.

When I arrived, I could see that everyone was already very fatigued; however, people were still finding a way to maintain the monotonous and heavy pace. I was very impressed with FEMA's staff. They were all very friendly, extremely knowledgeable and professional. Similarly, I was thoroughly impressed with all of our HHS counterparts. I was amazed at how despite all that went into this COVID response, FEMA still needed to find time to prepare for the upcoming Hurricane season, and to remain vigilant to react and respond to any other emergencies that could



occur. Overall, it was a very positive and eye-opening experience. I'm proud to have served in my role there in Texas.

1. What is your current assignment in USPHS?

Regulatory Research Officer / Engineering Analyst at Winchester Engineering and Analytical Center

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Manage public health crisis in FEMA Region 6.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

HHS/ASPR Liaison Officer at FEMA's Region 6 Headquarters.

4. What would you consider your major accomplishment?

Successfully facilitated a common operating picture between ASPR and FEMA.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Gain enough understanding to filter through many sources of information to determine what was of primary importance and interest to ASPR and FEMA.

6. What are some of your best memories from the experience?

Working with and learning from FEMA leadership in Region 6.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Every deployment is different, so be prepared to be flexible to the needs of the mission.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

No post-deployment guidance was provided for reintegration in terms of any requirement for self-isolation/quarantine, etc.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Understand that often you will feel overwhelmed initially. There may be a learning curve the first few days before you begin to feel comfortable with the mission, tactics, daily schedules, terminology, chain of command, etc. With diligence you will quickly become more knowledgeable and increasingly a valuable contributing asset to the mission.



CAPT Gretchen Cowman, P.E. DrPH, National Institutes of Health (NIH)



1. What is your current assignment in USPHS?

Branch Chief, Laboratory Design and Construction

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Design of a \$123M, six-story addition to the National Institute of Allergy and Infectious Diseases Vaccine Research Center. This is a high priority project funded by the Coronavirus Aid, Relief, and Economic Security (CARES) Act that will expand biomedical research space for the development of lifesaving vaccines that protect against coronaviruses and other infectious disease threats.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

I am the lead project officer managing the design of this critical facility. This role involves coordination with a diverse team of architects, engineers, end users, and NIH institute



leadership.

4. What would you consider your major accomplishment?

Bringing together a diverse and talented team to advance the design of the Vaccine Research Center addition in a high-pressure environment. This is a large, multi-year project that is still in progress. We expect to complete design by April 2021, begin construction in September 2021, and open the new facility in October 2024.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Keeping this project on schedule is a challenge, and schedule is very important due to the critical work done by the Vaccine Research Center. Timely and effective communication with the many stakeholders involved in this project is key to addressing this challenge.

6. What are some of your best memories from the experience?

Virtual bi-weekly progress meetings with lots of stakeholders highly engaged to contribute to the success of the project.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Whatever you are asked to do, do it to the best of your ability. You are making important contributions to protect the health of the American people. Remember to take time for yourself – you need to be healthy and energized in order to help others



***CDR Tanya Davis, P.E., BCEE, Indian Health Service
(IHS)***

Name of Deployment for 2020: Testing and Diagnostics Work Group COR/Logistics Team
(July 13 to August 12, 2020)

Deployment Team: I am a member of APHT #1

1. What is your current assignment in USPHS?

District Engineer, Nashville Area

2. What was the mission of your deployment or focus of your COVID-19-related activities?

I was part of the Testing and Diagnostics Working Group (TDWG) COR/Logistics team, that consisted of 5 PHS officers (with two PHS engineers), a Coast Guard Officer, Air Force Officer, and an HHS civilian/COR III.

As a team, we provided a quick transition from FEMA and HHS to distribute COVID-19 testing swabs and media to U.S. States and territories and Other Federal Agencies to support the White House's Opening Up American Again campaign. We stood up over \$500 million dollars of swab and media contracts from ground zero; distributed 14.8M swabs, 13.7M media to all states, territories, and federal partners, including 2M in surges; and have started a national swabs and media stockpile.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

My understanding was that I would serve in a logistics/COR role on the ground. Upon arrival, I identified an immediate need to manage the COVID-19 swab and media e-mail box. The swab and media inbox was set up for states, territories, and federal partners use to request swab and media surges. I became the primary owner of the inbox and developed a process for surge request approvals and tracking.

4. What would you consider your major accomplishment?

My major accomplishment was developing the swab and media surge request process and tracking sheet.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Initially, the team did not have a team leader that worked well with the group. By the end of the second week, the team identified a leader, and everything fell into place.



6. What are some of your best memories from the experience?

I developed good friendships with the other members on the team. It was also exciting to be working in the same building and the same floor with HHS and USPHS leadership.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

As with any deployment involving officers from across USPHS, the nation, and other uniformed services, each individual has their own unique skillsets to bring to the team. The role you initially deploy to may not actually be the one for which you are the best fit, and that is okay. The same could be said of your team members. In these instances, do your best to remain patient, humble, flexible, and always ready to improvise in order to accomplish the mission.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

Transition to regular daily activities has been seamless.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

For those engineers who are not already a COR III, I highly recommend getting your COR III certification. Not only is COR III important to manage high-dollar contracts (in HHS, anything over \$10M), but also gives the officer additional credibility and, in general, there seems to be a short supply of COR IIIs in HHS.



***CDR Kurt Kesteloot, MSE, MPH, P.E., BCEE, CPH,
National Park Service (NPS)***

1. What is your current assignment in USPHS?

National Park Service Office of Public Health Field Services Branch Team Lead

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Manage four USPHS officers who collectively all worked together to serve 120 plus National Parks in decisions on how to address COVID-19 public health concerns. I also assisted two other team leads as needed and we all worked with 15-20 officers to protect the health of millions of visitors and 12,363 employees in 419 park units.

3. What was your understanding of your role before deployment? Was that your role during your deployment? Address COVID-19 public health concerns at national parks and make sure our officers have all of the information necessary or support to serve 120 plus Parks.

4. What would you consider your major accomplishment?

To date no officer has become ill and as of 7/16/2020, 76 of ~12,363 National Park employees have become ill and 53 have recovered.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

We needed more people to respond to the constant stream of questions on a virus that many of the public health professionals did not have answers for.

6. What are some of your best memories from the experience?

All of the USPHS officers in the National Park Service worked together even if they were from different programs to help serve the agency and nation in the global COVID-19 pandemic.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Try not to exceed 10 hours of work per day. We are in this for a long duration. This is not your typical natural disaster that may require very long hours for a few weeks and then less time as community's recovery. Until there is a vaccine, or the nation/globe develops immunity, we will continue to have to serve the U.S. and world with COVID-19 and other diseases that many resurface or develop.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

It has been hard to move back to our "normal" duties because there continues to be a demand for COVID-19 questions.



9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

- It is hard to breath with a face covering and please make sure you drink plenty of water.
- Traveling is harder now than ever, do not be afraid to ask people to wear a face covering if you must talk to them. Also, do not be afraid to walk away from a situation that does not feel safe given COVID-19 concerns.
- Meetings with large groups helps to address concerns and may reduce the number of individual calls about employee exposures, when someone can return to work, etc.
- When time permits, it is good to communicate with local public health jurisdictions to help ensure national park plans do not create a negative impact on the health of a local community.
- Wastewater systems are biological systems. If you have a facility that uses an excess amount of disinfectant along with the fact that you have limited flow from low visitor usage, your biological system may die and cause you to exceed discharge permit regulations.



CDR Kesteloot showing the temperature of the free water offered in Hot Springs National Park.



CDR Kesteloot and LCDR Dondzila at Hot Springs National Park jug filling station in June to follow up on Legionella concerns in the drinking water at the park. Note this park celebrates 100 years of being a park in 2021 and had two or more USPHS officers serve as some of the first park superintendents.



CDR Kesteloot and LCDR Dondzila evaluating the Hot Springs National Park thermal water systems' first set of booster pumps and controls. Note that the water is still about 145 degrees Fahrenheit at this point in the system.



CDR Kesteloot and LCDR Dondzila evaluating the **Hot Springs National Park** main thermal water collection line at the overflow weir before the water enters into the first main water reservoir at ~147 degrees Fahrenheit.



Robert Pugsley, **CDR Kesteloot**, and **LCDR Dondzila** on top of the new **active sludge wastewater treatment plant at Buffalo Point in Buffalo National Riverway park**. This plant was recently installed based on recommendations provided by National Park Service Office of Public Health.



LCDR Michael D. Gifford II, CSP, PMP, REHS, National Park Service (NPS)

Deployment Team: NPS National Incident Management Team (IMT)

1. What is your current assignment in USPHS?

Program Manager for the NPS Park Facility Management Division – Risk Management/Safety

2. What was the mission of your deployment or focus of your COVID-19-related activities? Ensure agency personnel and the public were protected during the acceleration of COVID-19 and establish effective public health tools to close and re-open all National Parks.

3. What was your understanding of your role before deployment? Was that your role during your deployment? Before: fill roles within the Incident Command System to accomplish Command objectives. During: I filled 3 roles throughout the deployment – NPS Director’s Liaison, Operations: Policy and Guidance Branch member, National Safety Officer

4. What would you consider your major accomplishment? Tough to choose here...
As the NPS Director’s Liaison, I spearheaded the development and execution of a National level tracking system for 419 parks/monuments. Initially, we had a ton of information/reports coming in and we were not organized. The new system captured essential public health and facility data from each asset to depict a real time situational update.
As the National Safety Officer, I coordinated with local/regional/national stakeholders to ascertain personal protective equipment (PPE) needs for the NPS. After identifying NPS needs, I collaborated with other response team members to deliver PPE efficiently and establish safe operations at national distribution centers

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Training/Qualifications: Early on, it was a name game. People within the emergency response world for the agency knew one another and had worked together. I was an unknown entity at first. They did not know my experience level and I did not have a piece of paper saying, Mike is qualified to fill X ICS role. I was able to prove myself given time, but it would have been nice to refer to a PHS ICS qualification from the start.

6. What are some of your best memories from the experience?

Seeing how high-level political appointees and technical experts come to decisions in an evolving dynamic environment. It was also amazing to be part of a multi-disciplinary team of technical specialists that could create HQ level policy/guidance/tools for the field at an incredible rate of speed. Items that would otherwise take months to create were created in less than a week in some cases.



7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Two things:

- Be open to other's ideas and flexible. Leverage a multi-disciplinary team approach. We each have a skill or experience that led us to this point. This pandemic is so variable and new things are uncovered frequently. A team can accomplish amazing things if people communicate and work together.
- Try to piece together your specific mission to other teams and the organization quickly. This will help you tailor final products. You may be given a task that seems insignificant to you; however, it could be the fuel for a major accomplishment for the team or agency.

8. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Do not be afraid to say yes. Some of the best experiences come from stepping outside of your comfort zone.



LCDR Patric C. Klotzbuecher, MBA, CPH, Food and Drug Administration (FDA)

Name of Deployment for 2020

New Orleans CoVID-19 Community Based Testing Sites and Navajo Nation CoVID-19 Response

Deployment Team

Steady state: PHS-2 Rapid Deployment Force, Tier I;

March – June 2020: Community Based Testing Site Task Force and PHS Strike Team 6

1. What is your current assignment in USPHS?

I am currently assigned as a field Drug Compliance Officer to FDA's Office of Regulatory Affairs, Office of Pharmaceutical Quality Operations.

2. What was the mission of your deployment or focus of your COVID-19-related activities?

As part of the Community Based Testing Site (CBTS) Task Force, I was deployed as a Team Leader to stand up and operate New Orleans' CoVID-19 Community Based Testing Sites. I was later deployed as the Planning Section Chief for Strike Team 6, supporting clinical augmentation of the Northern Navajo Medical Center (NNMC) and operations of a co-located CoVID-19 Alternate Care Site (ACS).

3. What was your understanding of your role before deployment? Was that your role during your deployment?

In advance of the first wave of the CBTS mission, officers were instructed that we were being deployed to advise, assist, and enable our local and state counterparts at each testing site. With boots on the ground, that became much more involved to include: establishing logistics supply chains and burn rates, liaising between local/state assets and Federal agencies, training all deployed personnel in basic biosafety, quality control of patient & test data and sample management, monitoring operations for quality assurance and infection control, briefing ground commanders on HHS/federal operations for situational awareness, and developing operational efficiencies of each site within the CBTS concept of operations.

I was originally tasked as Strike Team 6's Logistics Section Chief, with a broad understanding of what was needed at the Shiprock, NM ACS. While in-transit, the Team Commander identified the emergent need for planning, coordination, and information management between the numerous governing bodies due to the complex nature of the response and asked me to take on the role of Planning Chief. In theater, the neat picture of an ACS staffed and operated independently to support the NNMC, morphed to integration and direct augmentation of the NNMC's clinical operations.



4. What would you consider your major accomplishment?

1)Facilitating the safe startup & ramping up to full operational capacity of COVID-19 Community Based Testing Sites in New Orleans and Jefferson Parishes.

2)While maintaining our team’s capability to pivot to full operating capacity of the 40-bed ACS, we were able to meet the Navajo Nation & IHS where they were by providing the clinical and command & control support to sustain the quality of care delivered to patients of the Northern Navajo Medical Center at the height of their surge of COVID-19 positive patients.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Politics and diplomacy are always large factors in how things play out on the ground for us, but with so many partners involved in the COVID-19 response, the constant push and pull for control, resources, and public perception were especially challenging. For example, in New Orleans we were coordinating operations of the CBTSSs with The Louisiana Governor’s Office of Homeland Security & Emergency Preparedness (GOSHEP), the City of New Orleans’ Office of Homeland Security & Emergency Preparedness (NOSHEP), multiple Battalions & Wings of the Louisiana Army and Air National Guard, the Louisiana Department of Health’s New Orleans and Jefferson Parish Health Units, and approximately 500 patients per site per day.

Similarly, in New Mexico we were coordinating both primary and secondary mission objectives with the Navajo Nation, Indian Health Service, the NNMC’s Incident Command Structure, the ASPR Incident Management Team, CCHQ CC, and Strike Team 6 itself to help NNMC staff surge successfully, secure in the knowledge that a patient-ready, well-staffed ACS was there to provide the comfort of “overflow” capacity when needed.

6. What are some of your best memories from the experience?

I had the pleasure of deploying alongside several officers whom I have worked with downrange with before and several other engineers (CDR Shane Deckert in New Orleans, LA and CDR Ed Zechmann in Shiprock, NM). Aside from the personal relationships fostered in our little downtime, the camaraderie that is built in such arduous conditions and stressful circumstances is invaluable.

Even more gratifying was the rapport that we, as teams, were able to build with our local/tribal/state counterparts. During each deployment we stepped into theater with minimal visibility on who we would be working with. Approaching our missions with analytical mindsets, marrying critical thinking with our diverse skillsets to address issues at every turn, and being able employ a variety of fieldcraft in our respective disciplines were testament to our Corps’ value-adding capabilities. It showed our partners what we, as officers with a wide array of specialized skillsets, bring to the table and clearly demonstrated the need for subject matter expertise in public health in every aspect of our deployments.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Develop a certain comfort with discomfort. You will likely be asked to operate outside of your



area of expertise, beyond the scope of your classical training, and far from your traditional deployment role(s). Embrace it. Extend beyond your comfort zone. Become self-aware enough to know what you don't know and utilize your interdisciplinary skills to brave that learning curve, perform to the best of your abilities in whatever your objectives may be, and lead by example every step of the way.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

Each deployment came with a different risk assessment/mitigation process. The one constant was discord between what our administrative chain of command expected and called for and what our operational chains of command would actually provide. Demobilization plans were fluid all the way up until we transitioned each site, and with that dynamic comes a certain degree of anxiety. But reintegration from both missions came with much moral support from our fellow officers and was greatly facilitated by management at my permanent duty station.



Photographs of CDR Ed Zechmann and LCDR Klotzbuecher in front of Shiprock, boulders in hand and ready to “engineer” things, taken by CDR Hilary Duvivier (Pharmacist).



Photographs of **CDR Ed Zechmann** and **LCDR Klotzbuecher** in front of Shiprock, boulders in hand and ready to “engineer” things, taken by **CDR Hilary Duvivier** (Pharmacist).



LCDR Shayne Gallaway (Scientist) performing a quality control check to ensure integrity, infection control, and chain of custody of a patient sample at **New Orleans' Louis Armstrong Park Community Based Testing Site**, taken by **LCDR Patric Klotzbuecher**.



Louisiana Army & Air National Guardsmen and New Orleans Health Department personnel collecting, preparing, and documenting patient samples and **LCDR Klotzbuecher** conducting a quality assurance check of patient sample data at **New Orleans' Louis Armstrong Park Community Based Testing Site**, taken by **LCDR Shayne Gallaway (Scientist)**



Photograph of Strike Team 6 in front of Shiprock (“*Tsé Bit’a’v*”) in Navajo Nation, taken by the Northern Navajo Medical Center’s Public Information Office Staff.



***CDR Leo Angelo Gumapas, National Institute of Health
(NIH)***

***CDR James Coburn, Food and Drug Administration
(FDA)***

***LCDR Abbas Bandukwala, Food and Drug
Administration (FDA)***

LCDR David Dar, Food and Drug Administration (FDA)

Name of Deployment for 2020 Commissioned Corps Headquarters (CCHQ) Readiness
Deployment Branch (RDB) Augmentation

1. What is your current assignment in USPHS?

CDR Gumapas – Mechanical Engineer at NIH

CDR Coburn – Senior Advisor for Emerging Technologies at FDA

LCDR Bandukwala – Science Policy Analyst, Biomarker Qualification Program at FDA

LCDR Dar – Acting Deputy Division Director in the Office of In Vitro Diagnostics and
Radiological Health at FDA

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Track the availability status and deployment of over 6,000 USPHS Commissioned Corps Officers for CCHQ RDB Missions. Create reports to inform leadership the status of Corps Officers, deployment teams, and agency activities as the response to COVID-19 continues to grow.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

The role was described as creating a method to access and manage data supporting CCHQ with data analysis using Microsoft Excel, SharePoint, and Access. During the deployment, we also implemented automation and process improvements that improved data quality, increased officer information available to CCHQ, reduced potential for errors, and reduced time needed to track deployments and availability.

4. What would you consider your major accomplishment?

We co-developed an Access Database to track the availability status of over 6,000 Officers for CCHQ RDB Missions. The database automates many aspects of maintaining officer



availability and deployment status as well as providing accurate reports to PHS and Administration leadership. To do this, the database executes 41 RDB Business Rules, updates 36 Officer attributes from monthly ad hoc CCHQ reports, and generates 15 report queries to apprise CCHQ leadership on daily and weekly reports automatically. We authored a comprehensive standard operating procedure to document the business processes and information sources to effectively roster officers. The document is serving as the blueprint for the current contract within Division of System Integration to implement an enterprise solution for rostering officers for RDB.

We also streamlined the logistics to distribute 1,840 coins for USPHS Commissioned Corps Officers who supported the 2017 Hurricane Maria/Irma deployments.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

The systems and methods to track Officers who were deployed to respond to the COVID-19 pandemic was relatively simple and was overwhelmed due to the unprecedented number of Officers deployed for this response. Officers were deployed by CCHQ from over 21 agencies and many of the agencies deployed thousands of their PHS Officers to their own response effort. There was no coordinated and standardized system to manage and use this data. Reports containing deployment information were provided in different formats and variations of information. The team worked with agency liaisons and CorpsCare to resolve inconsistencies in this information. The team then created dozens of data validation rules, processes, and automated workflows to turn the raw data stream into 15 reports and charts summarizing the status of the Corps and the response.

6. What are some of your best memories from the experience?

The opportunity to work and learn from other USPHS Commissioned Corps Engineers to build a system that streamlined rostering officers for the multiple CCHQ RDB missions. As mentioned above many reports and processes needed to be developed to provide accurate and usable information. Updating reports or new types of reports were requested daily. Listening to a difficulty or problem allowed the team to provide solutions and work together to develop new functions to provide the most useful data in a concise and effective method.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

For both Agency work and deployments, it's beneficial for engineers to maintain (at least) a base level of competency in Microsoft Excel, Access, and SharePoint. More effective use of our data can result in efficiencies that streamline operations and free resources to better serve public health. Knowledge of how to effectively manage and automatically process large sets of data from disparate sources is a consistent need in many deployment teams.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

Yes, it was a smooth transition back.



9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

The engineer mindset and application of engineering principles was beneficial in creating the database, reports, and other IT structures. It is beneficial for PHS Engineers to become familiar with different IT skills and can make significant contributions on deployments.



CDR Leo Angelo Gumapas, National Institutes of Health (NIH)

Deployment Team: Rapid Deployment Force (RDF) 2, Tier 1

OPDIV: National Institutes of Health

1. What is your current assignment in USPHS?

Mechanical Engineer at the National Institutes of Health

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Staff the night shift watch desk and document and resolve issues for nearly 1,000 guests from the Princess Cruise Line

3. What was your understanding of your role before deployment? Was that your role during your deployment?

Logistics Officer prior to deployment and after and during deployment I did serve as Logistic Officer in some capacity. However, I did feel more like a hotel manager listening to guest issues and coordinating with various components in the response to make the guest stay more hospitable as they awaited the quarantine period to be over so they could return home.

4. What would you consider your major accomplishment?

- With the assistance of CAPT Michael Smith, we contacted 104 people to identify the location of 425 pieces of misplaced luggage in a 3-day span
- 188 of the 425 bags had to be driven to Miramar Marine Air Corps Station located in San Diego, CA
 - Coordinated logistics to transport missing luggage
 - Coordinated with LCDR Jonathan Burgos and LCDR Jake Dyer to load 154 of the 188 bags into the box truck to get the luggage out of the elements
 - Drove 517 miles with CAPT Michael Smith from Travis Air Force Base to Miramar Marine Air Corps Station to drop off and distribute luggage to Princess Cruise Line guest
 - The 237 out of 425 bags needed to distribute to 10 different locations
 - Resolved issues with CAPT Michael Smith on how to ship bags to three international locations, which included Canada, Scotland, and Ireland

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

- Adjusting to night and day shift hours periodically
- Working the night shift hours



- The initial 3 days of the deployment when receiving nearly 1,000 irate guests from the Princess Cruise Line
- Injuring my back from lifting a heavy luggage the wrong way and muscling through the pain for the remainder 5 days of the deployment
- Seeing the disappointment from a lady at Miramar Marine Air Station cry for not getting her luggage delivered the day CAPT Michael Smith returned

6. What are some of your best memories from the experience?

At Miramar Marine Station, when CAPT Michael Smith and I were distributing the luggage and hearing the claps and cheers.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

- Use proper lift techniques when lifting packages on deployment by using your legs
- Ask for assistance when lifting heavy items
- Have a book with you when you are staffing a night shift watch desk
- If staffing a quarantine station, then guest will be irate. If they yell, then let them yell, but listen to their concern.
- Do not take it personal and when you listen allow them to vent, then they are more personable to you later on in the deployment.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

It was good. I slept a lot to get reintegrated back to day shift hours.



Loaded Truck Bound for Miramar.jpg – CAPT Michael Smith and CDR Leo Angelo Gumapas pose with two Logistic Response Assistance Team members loading a box truck with almost 200 pieces of luggage at 12:46 am on March 14, 2020



Sorted Luggage – Travis Air Force Base.jpg – Taken on March 13, 2020 at Travis Air Force Base at 3:54 am indicating 400 pieces of luggage alphabetized by last name.



Unsorted Luggage – Travis Air Force Base.jpg – Taken on March 12, 2020 at Travis Air Force Base at 9:07 pm indicating over 400 pieces of unclaimed luggage



Staffing Night Shift Desk at Travis Air Force Base – The night shift desk was used as the main call desk to respond to nearly 1,000 guests from the Princess Cruise Line quarantined at Travis Air Force Base. The picture was taken on March 17, 2020 at 8:51 pm, and it shows: LT Jason Caballero and CDR Erich

Photo Credit: CDR Leo Angelo Gumapas for all 4 photos



**LCDR Timothy Martin, PhD, EIT, Food and Drug
Administration (FDA)**

Deployment Team: Tier 1; Regional Incident Support Team 3 (RIST3)

1. What is your current assignment in USPHS?

Director Regulatory Operations Officer

2. What was the mission of your deployment or focus of your COVID-19-related activities?

HHS Liaison Officer

3. What was your understanding of your role before deployment? Was that your role during your deployment?

Coordinate State planning and operational needs with HHS Incident Command and available resources. My role during deployment was the same as my understanding of my role before deployment.

4. What would you consider your major accomplishment?

I ensured Virginia had the necessary tools and HHS resources to respond to medical surge, mass fatality, PPE shortages, drug shortages, PPE decontamination, and testing site shortages. It was very rewarding to see how my interventions helped Virginia stabilize from the overwhelming rate of COVID+ cases and deaths.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Information overload and prioritization of needs. Trying to act with limited hospital and medical information at the State level. Adapting to new and rapidly changing critical care protocols and ruthless prioritization of scarce resources.

6. What are some of your best memories from the experience?

Seeing Virginia's Emergency Operations Center and interacting with different ESFs to hear their perspective and management of the emergency response.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic? Focus on achieving the team goal and don't get hung up on small things that distract from the mission. Pace yourself and pay attention to your individual limits.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities? The transition was very easy.



9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

To give other officers a perspective of activities of an HHS Liaison Officer, a few highlights of my deployment are that I:

- integrated into each of the State's workgroups, shared best practices, and identified resources needed to address outbreaks in nursing homes, prisons, and meat plants
- developed information sharing tools and provided daily, detailed updates to HHS Region 3 on urgent issues, resource shortfalls, major changes in governance, confirm cases and deaths, fatality management, healthcare facility resource utilization, nursing home outbreaks, patient surge, testing facilities, and PPE decontamination resources.
- acted as HHS Region 3 point of contact for Virginia in a multi-Agency mission involving stakeholders from the DE/MD/VA Health Departments, Emergency Management, Ag Department, poultry industry, poultry federations, CDC, and HHS on the outbreaks occurring in Virginia's Eastern Shore with impending impact on the meat supply chain.
- conducted needs assessment of poultry worker facilities and ensured rapid procurement and delivery of 45,000 cloth masks.
- conducted PPE shortage analysis and tracked PPE shipments in the federal online WebEOC tool, ultimately ensuring timely procurement of 386,976 gloves, 82,620 gowns, 510,221 surgical masks, 390,208 N-95 masks, 101,035 face shields, and 10,307 coveralls.
- Received, reviewed, and assessed 3,991 emails and communicated 865 emails critical in information sharing, clarifying Requests for Information, and ensuring provision of resources to fill urgent issues.
- Maintained situational awareness and attended 80 hours of meetings on HHS Region 3 liaison daily operations/accomplishments, team planning/operations/logistics, surge planning and Alternate Care Sites, governor press briefings, HHS Region 3 command and staff daily operations/accomplishments, private sector and affected stakeholders, PPE needs, and outbreaks.
- Developed liaison officer succession package and provided training to effectively transition duties to the incoming liaison officer.



CDR Kris Neset, PE, MSM, Navajo Nation Water Access Team (CDC/IHS)

Name of Deployment for 2020: Navajo Nation Water Access Mission

Deployment Team: Navajo Nation Water Access Team (CDC/IHS)

1. What is your current assignment in USPHS?

Engineer Consultant with the CDC – National Center for Environmental Health (NCEH)

2. What was the mission of your deployment or focus of your COVID-19-related activities?

- Using available databases, advise on activities to identify homes/communities without access to piped water sources or with intermittent access to potable water: Chapter rankings and GIS water point survey dashboard were completed.
- Recommend interventions including homes at-high risk for COVID and identify resources to address lack of water access.
- Advise on implementation of Navajo Nation approved recommendations to improve access to safe water.
- Advise and develop locally appropriate communication strategies about water access.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

My understanding of my role before deployment and my actual role during deployment lined up well with each other. This shows it was a well-planned mission and a lot of coordination was completed by IHS, CDC, and the Navajo Nation prior to sending out the first IHS/CDC field team. I was the CDC “subject matter expert” water Engineer that would be working with a CDC Environmental Health Officer and a CDC Epidemiologist along with IHS Engineers from HQ’s and Navajo Area.

4. What would you consider your major accomplishment?

We were the 1st of (I believe will be 5 teams) that are completing 30-day rotations based out of Gallup, NM to support the Navajo Nation Water Access Mission. I felt like our initial team set a solid roadmap for the follow-on teams that have done an outstanding job of operationalizing the plan. About 50 transitional watering points will be completed as part of the Navajo Nation Water Access Mission. In addition, water hauling missions and hand washing stations are being completed all over the Navajo Nation.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

The City of Gallup, NM and the Navajo Nation were on various curfews/lockdowns on/off during our 30-day deployment so availability to access sites was difficult at times. The Navajo Nation is a vast area (about the size of West Virginia) and many areas are remote so travel time



for site visits and cell phone communication was a challenge. Prior planning/coordination was critical before traveling to make wise use of time.

6. What are some of your best memories from the experience?

Working well together as a joint CDC/IHS team of engineers and other health professionals towards the mission of increasing water access to the Navajo Nation. The Navajo Nation is a beautiful and vast area and the people were very friendly even under the difficult circumstances during the height of the COVID-19 pandemic in the area.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic? Ask questions prior to deployment to help set yourself up for success while on deployment. With any deployment, you will be busy and most likely working longer than normal work hours and 6 to 7 days/week; however, take time for self-care. Self-care means different things to different people. I like physical fitness so for me I carved out some time each evening after work to do some trail running in the Gallup, NM area or did a Crossfit type workout on the non-running days. This helped keep my mental state in-balance and I feel it helps me be more productive during mission/work related tasks daily.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

CDC was supportive in post deployment services offered as well as post deployment de-briefs completed. It was a fairly-smooth transition back to daily activities. I was new to CDC and deployed right after completing in-processing, so the timing worked out well.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

It was a fulfilling mission both professionally and personally. Be ready to go when called upon and expect 30-day deployments to be the norm in the future.



***LT Chaolong Qi, PhD, P.E., Centers for Disease Control
and Prevention (CDC)***

Name of Deployment for 2019 Novel Coronavirus Response

Deployment Team: CDC IMS Worker Safety Health NIOSH

1. What is your current assignment in USPHS?

My current assignment is a General Engineer at CDC/NIOSH.

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Between 02/07/2020 to 02/26/2020, I was deployed to the quarantine station at the SFO airport for the mission of screening travelers from China. My main activities included conducting hazard assessment of the quarantine station, daily inspection of the operation for safety, providing PPE reinforced training and exercise for deployers, screening travelers and providing interpretation (mandarin) as needed.

Since 05/06/2020, I have been deployed in the CDC IMS Worker Safety Health (WSH) team. My initial role was a subject matter expert (SME) conducting assessment of facilities in various occupational settings in Ohio where there was a Covid-19 outbreak. The assessment focused on their implementation of Covid-19 control measures by following relevant CDC/OSHA guidance. Since 7/11/2020, my deployment role was elevated to the Industrial Hygiene Group Lead in the Technical Assistance Unit, and I started supervising 18 industrial hygienists and engineers to provide technical assistance on conducting facility assessment on their Covid-19 response following nationwide requests from health departments of various states, locals, and tribes.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

For my deployment to the SFO airport, my initial role was the Safety Officer and later changed to secondary/tertiary screener.

For my deployment to the CDC IMS WSH team, my initial role was a SME providing technical assistance to Ohio, and it later elevated to the Industrial Hygiene Group Lead in the Technical Assistance Unit.

4. What would you consider your major accomplishment?

For my deployment to the SFO airport, my biggest accomplishment, looking back now, was that no deployer got sick or Covid-19 when I was the safety officer. On task level, my major accomplishments include 1) providing initial hazard assessment of the quarantine station with an itemized recommendation on improving the screening process, disinfection practice, waste management, PPE reinforced training and exercise; 2) conducting countless screenings for



travelers.

For my deployment to the CDC IMS WSH team, I first helped draft the facility assessment checklist for meat/poultry processing plants, which was later cleared for use by deployers, health officials or facility management to assess the facilities' Covid-19 response. I then led 9 facility assessments including 4 meat/poultry packing plants, 3 food processing plants, and 2 agriculture farms. As the Industrial Hygiene Group Lead, I supervised a group of 18 industrial hygienists and engineers and brought the new group members up-to-speed on conducting facility assessment as well as reporting the assessment findings. Between 7/16/2020 to 8/18/2020, deployers from my group conducted over 40 facility assessments in 6 states and 2 tribes, with the facilities ranging from meat/poultry packing plants, food-processing plants, schools/childcare, correction facilities, farms, nursing homes, casinos, manufacturing plants, construction sites, and EMS etc.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

The most challenging experience was due to the coordination issues between different agencies and task forces.

6. What are some of your best memories from the experience?

My best memory is certainly the people, our deployers. It is a true honor to serve with such groups of outstanding people (both PHS officers and our civilian colleagues), who worked tirelessly for the same mission, covered and supported each other along the way, and at some moment had fun together. Even for colleagues from my same agency and duty station, we did not get to work so closely during our regular agency work. But during the response, many of us got to work together daily and got to know each other so well. These will be unforgettable memories for me.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Don't be afraid to lead. As a junior officer, I was initially anxious to lead a project of facility assessment, and later to lead to a larger group. But my experience is that engineers have many skills that lead us to do well on things like attention to details, planning/organizing in logical and efficient ways, which are very critical in an emergency response, especially on leadership positions. On technical level, many engineers' experience/skills on inspection, building assessment, project planning can be readily transferable to similar response activities.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

This does not apply to me well. Shortly after returning from my deployment to SFO airport, we went to the full teleworking practice. But I felt I transitioned well during that two weeks.



LT Kevin Remley, P.E. Indian Health Service (IHS)

Navajo Nation COVID-19 Water Access Mission, Team #3, Indian Health Service



LT Kevin Remley flow testing a transitional watering point as part of the Navajo Water Access Mission.



Navajo Water Access Mission Team #3 from left to right: **CDR Darren Ausdemore (Team Lead)**, **LCDR Derrick Buck**, **LT James Courtney**, **LT Kevin Remley**, **LT Dara Zimmerman**.

1. What is your current assignment in USPHS?

I am stationed in the Portland Area Fort Hall Field Office, Division of Sanitation Facilities Construction as a Senior Environmental Engineer.

2. What was the mission of your deployment or focus of your COVID-19 related activities?

In April 2020, the Navajo Nation leadership requested support from the CDC to participate with IHS to “advise actions and aid in overseeing community-based interventions led by IHS or the Navajo Nation”. As of May 16, 2020, the Navajo Area had 4,172 cases of COVID-19, 59% of all cases reported by the IHS. The CDC and IHS determined one of the leading causes for the rampant COVID-19 cases is related to the lack of sanitary conditions in homes with multiple generations under one roof. The Navajo Water Access Mission was established and funded with CARES Act funds to provide transitional watering points (TWPs) to the areas hardest hit by COVID-19. The TWPs would provide watering points closer to the individual homes that haul their own water for domestic use by providing easier access to piped water. The mission also included a Safe Water Storage Program that provides all eligible Tribal members to receive a 5-gallon water storage container and disinfection tablets to provide residual disinfection.



3. What was your understanding of your role before deployment? Was that your role during your deployment?

My understanding was that our team would oversee the construction of approximately 40 TWP's and provide operator-training for the water points to increase water access across the Navajo Nation. Shortly after arriving, the number of TWP's increased to 55. Our team's role consisted of providing construction oversight of approximately 40 sites, site redesigns due to unforeseen site conditions, and ensuring the selected designs provided the desired flows expected at the hydrants. Delays in acquiring key components of the TWP's prevented our team from being present for the construction of all sites and for when the operator-training portion of the mission would begin.

4. What would you consider your major accomplishment?

I was able to oversee the successful construction of 10 TWP's, which will provide easier water access to an estimated 700 homes. By being present, maintaining effective and open communication with my assigned construction crews, and my knowledge of proper engineering practices I was able to assist the construction crews overcome unexpected events that would have otherwise caused delays in starting and completing the construction of TWP's.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

I was deployed on Father's Day, which was also the day before my family's scheduled summer vacation. It was difficult being away from them for the 30-day deployment and missing many activities we had planned.

Unexpected site conditions, such as discovering that a waterline we planned for connection to provide water to a transitional water point being abandoned, or difficulty in locating waterlines because the as-built information for the existing waterlines from the local utility authority were inaccurate.

The mission involved being in 90+ degree heat with limited shade for multiple hours along with an hour to hour and half (or more) travel times 4 days a week. This was physically exhausting and required taking special care of myself to avoid drowsy driving, especially for the return trip at the end of the work day.

I also experienced the challenge of having the USPHS promotion results released and finding out that I was passed over for promotion near the beginning of the deployment.

6. What are some of your best memories from the experience?

The camaraderie of working daily with five other USPHS engineers on a focused, well-defined mission for an extended period. I also loved working with the Navajo construction crews, knowing that our efforts were bringing real, tangible benefits to the Navajo people.

7. Do you have any advice to share with fellow engineer officers that are responding to the pandemic?



Do your best to be prepared physically, mentally, and professionally for when you deploy. Knowing that I left my family completely prepared to not have me around for a month and my agency duties in a good place for those covering for me during my absence allowed for me to not worry about what was going on while I was absent and stay focused on the mission.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

While my reintegration experience was smooth, I did not properly prepare myself mentally/emotionally for the additional period after the deployment for self-isolation. I had planned to visit my parents on my way home but realized it would not be prudent to do so after being in a COVID hotspot. I also was not emotionally ready to be semi-isolated from my wife and children for 14 days even though I was home.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Being deployed while finding out I was passed over for promotion was probably the best thing that could have happened to me. I admit that I was upset, angry, and experienced a myriad of other emotions all at once when the results were released. I was able to cope with the disappointment and pull myself out of a victim mentality very quickly because I was so busy with the deployment mission and doing what I love to do: using my personal and professional skills to serve our Nation.



*CDR Joshua Sims, MS, PE, PMP, Indian Health Service
(IHS)*

Deployment Team:

CDR Francis Chua

LCDR Ross Hanson

LCDR Ali Ali

LT Melissa DeVera

Name of Deployment: Navajo Water Access Mission

Rank, First and Last, Credentials: CDR Joshua Sims, MS, PE, PMP, Dist/Treat 2

Deployment Team: Member of Tier 3 roster E, deployed as part of “Team #2” for an IHS request. Team members included CDR Francis Chua, Lcdr Ross Hanson, Lcdr Ali Ali, LT Melissa DeVera, and myself.

1. Current assignment: Tribal Utility Consultant for Escondido District & Clovis Field Offices

2. Deployment Mission: A large percentage of the Navajo Nation does not have plumbed water at their homes, nor did they have access to watering points readily available. The mission was to provide Navajo Chapter Houses with community watering points, necessary to aid in the prevention of the spread of COVID-19.

3. Understanding of role prior to deployment vs. actual role: Prior to deploying the management team/Team #1 explained that we were to deploy for 30 days to conduct site assessments, planning, complete designs for 37 transitional watering points, to coordinate on scoping of Jerry cans, and to prepare/coordinate with the Navajo Tribal Utility Authority (NTUA) and Navajo Engineering and Construction Authority (NECA) on construction. The only major change from the original scope was the addition of more Chapter Houses. Instead of 37, the team completed assessment of 66 sites, and completed designs for 51 determined to be in need of improved access.

4. Major accomplishments: Team #2 completed:



- Site assessments for 66 locations covering more than 6,500 miles of driving. Determined that 51 sites were in need of a transitional watering point to provide increased access to drinking water, to improve sanitary practices.
- Completed design and planning for construction of these sites.
- Identified appropriate products to use in construction to ensure compliance with potable water standards.
- Coordinated pre-construction meeting with multiple high-level stakeholders.
- Completed a free chlorine experiment to determine maximum estimated number of days for safe water storage.
- Completed standard operating procedures for an Operations & Maintenance (O&M) manual.
- Finalized contract and construction documents including project summary, MOA, historic preservation, and Storm Water Pollution Prevention Plan (SWPPP).
- The mission will provide increased access to potable water for 4,259 homes lacking piped water, benefiting approximately 16,461 people, reducing the spread of COVID-19, as well as additional gastrointestinal diseases.

5. Challenges faced: The team faced significant challenges including communication issues that arise when coordinating with 66 different Navajo Chapters, all of which have their own leadership structure. Many of the chapter houses were closed due to the Navajo Nation having the second highest occurrence in the Nation of COVID-19 at the time. Additionally, these chapters are very remote and spread over long distances which required very long days. The team averaged approximately 10 hour days, 7 days a week, over the 30-day deployment.

6. Best memories: My best memories were of the tribal members and their appreciation for the service they were receiving. Hearing stories of families that normally spent an hour plus every morning driving to get water, and how the mission would allow them to do so in significantly less time. Knowing that helping in this way likely led to more sanitary conditions and prevention of COVID spread will stay with me forever. Also being able to spend time with fellow engineers and deploy for a role that actually included engineering work was a great opportunity. Lastly, while travelling so many miles we got to see a beautiful area of the country that I may not have otherwise.

7. Advice for fellow engineer officers: First and foremost, stay safe. Follow the guidelines put in place to help keep you safe. Keep a positive attitude. By keeping the goal of your mission in mind and who you are helping it can help alleviate the concern/discomfort that may otherwise arise from the impact on your normal life. Enjoy the experience, knowing that you are helping serve.

8. Post deployment/reintegration experience: We were tested/advised to complete 14 days of self-quarantine upon our return. Since I was already working from home prior to deploying,



this didn't have a major impact on my routine and I was able to transition back to home life easily.



Navajo Water Access Mission, Team #2 – CDR Frank Chua, LCDR Ross Hanson, CDR Josh Sims, LCDR Ali, and LCDR Melissa De Vera in Gallup, NM 06/22/2020.



Navajo Water Access Mission, Team #2 – LCDR Ali, CDR Josh Sims, CDR Frank Chua, LCDR Melissa De Vera, and LCDR Ross Hanson in field office, Gallup, NM 06/19/2020.



LCDR Hanson surveying a proposed community watering point location 06/03/2020.



LCDR De Vera documenting the proposed location of a community watering point 06/09/2020.



CDR Chua, LCDR Hanson, LCDR De Vera, CDR Sims, and LCDR Ali completing fit test for use of N-95 masks during deployment, at IHS Albuquerque Area Office 05/26/2020.



Team #2 hard at work in field office, Gallup, NM, 06/2020.



LCDR Hanson installing marker for proposed community watering point, 06/11/2020.



LCDR Ali inspecting existing community watering point facilities, 06/10/2020.



LCDR Michael Shahan, P.E., Centers for Diseases and Control and Prevention (CDC)

Deployment Team: CDC IMS Worker Safety Health NIOSH

1. What is your current assignment in USPHS?

Research Engineer, Senior

CIVIL SERVICE SERIES 0819: SANITARY/ENVIRONMENTAL HEALTH ENGINEER

Position Grade: 5

Position Primary Job: 94: TECHNICAL ASSISTANCE AND CONSULTING

2. What was the mission of your deployment or focus of your COVID-19-related activities?

I am working with the NIOSH respirator approval program. In response to COVID-19 - NIOSH is accepting and prioritizing particulate filtering respirator approval applications submitted by existing approval holders and new domestic manufacturers/applicants.

3. What was your role?

I perform the initial review of applications submitted for NIOSH respirator certification. I review engineering drawings, assembly matrices, user instructions, and provide feedback and consultation to stakeholders. I also conducted the final review of applications and issue testing and certification numbers to respirator manufactures, ensuring certified respiratory protection equipment for our nation's healthcare providers and first responders.

4. What would you consider your major accomplishment?

I worked with Ford Motor company on the approval of a public health emergency issued powered air-purifying respirator. The device went through the rigorous NIOSH approval process and received a limited, temporary NIOSH Public Health Emergency (PHE) PAPR approval. Please see the following URL for more information:
https://www.3m.com/3M/en_US/worker-health-safety-us/covid19/ford-papr/

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

We have worked 10 to 12-hour days, Monday through Friday and 4 to 6-hour days on the weekends since early March. We will continue under these operations until the public health emergency is lifted.

6. What are some of your best memories from the experience?

The gratitude that we received from American companies who are diving into the respiratory protection industry will never be forgotten. Our team has pulled together and put in an amazing effort to assist the American public and companies. All our tireless work and effort has been



worth it to ensure the end product is effectively and efficiently providing protection to healthcare workers and first responders on the frontlines of COVID-19. Our team has processed nearly 400 applications since the response began, which surpasses a typical annual application completion rate.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

As an officer we must remember is service over self. It is our responsibility to protect, promote and advance the health and safety of our nation.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

I am still deployed and will continue to be until the public health emergency is lifted.



LCDR Travis Spaeth, MS, P.E., Environmental Protection Agency (EPA)

Name of Deployment for 2020 COVID-19 Response

Deployment Team: HHS Liaison to the Commonwealth of the Northern Mariana Islands (CNMI) COVID-19 response.

1. What is your current assignment in USPHS?

Environmental Engineering Program Chief

2. What was the mission of your deployment or focus of your COVID-19-related activities?

Our mission was to assist the CNMI with building capacity at their hospitals and expand the capabilities of the CNMI in reducing the effects of the Covid-19 virus. I was assigned to work directly with FEMA to ensure they created a proper supply chain and were given resources to combat the virus.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

I went into the deployment with a very vague understanding of what my role was to be. My role was the HHS liaison, in this role I was able to work directly with the CNMI's COVID task force, FEMA, DOD and the Commonwealth Healthcare Corporation (CHC) as a liaison to and from HHS. I attended meetings, working groups, conference calls and any other pertinent meetings that were related to the Covid-19 response. I also helped CHC staff and the CNMI covid task force with initiating tracking of PPE (burn rates), ordering materials, and providing the federal partners the information they needed from the local agencies.

4. What would you consider your major accomplishment?

My biggest accomplishment was developing the relationships with all partners (FEMA, DOD, CNMI gov't, CHC). This proved to be vital to me being effective in getting the information needed to relay it back to FEMA and HHS Region 9 throughout my deployment. The other accomplishment was the tracking I was able to do. I had assisted the CHC with getting their PPE burn rate calculator and I also created a spreadsheet that tracked bed usage, ventilators (and usage), bed availability, cases, all COVID-19 tests (completed, positive, negative). With all the tracking the CHC and others ended up using a lot of my data in the spreadsheet to report back in their daily reporting to FEMA, HHS, CDC, etc.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

The unknowns with the virus was a major challenge.



6. What are some of your best memories from the experience?

I had quite a few but I think getting to know the CHC staff, the DOD and FEMA partners and creating relationships with many of the people in the response made it very rewarding.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

Take it day to day. COVID-19 information changes all the time even now it seems. Staff safe and do what you can to keep your head up.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

Reintegration was rather hard. Going back to daily duties was ok but it was hard to switch my mind off of the still ongoing COVID response (even if we had little to no active cases). I also came back to a large backload of work so it seemed like I still am catching up 3 months after the fact.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

Overall, it was a great learning experience. I think one thing we need to realize is sometimes in disasters decisions need to be made that aren't always ideal or the most economical, but they still need to happen timely to ensure a successful response.



LCDR Michael Sweeney, Food and Drug Administration (FDA)

**Name of Deployment for 2020 Name of Deployment - Florida Long Term Care Facility
Support Mission
Deployment Team: ST-8 team 6**

1. What is your current assignment in USPHS?

FDA

2. What was the mission of your deployment or focus of your COVID-19-related activities?

My laboratory work as an Engineer at the Winchester Engineering and Analytical Center was related to COVID-19 activities. My laboratory was considered both essential and non-portable, so we never closed when much of the rest of the country did. We are located in Massachusetts which was one of the hardest hit areas in the country.

Early on in the pandemic the shortage of PPE was a very big issue. Nurses and doctors had to make the most of what they could get. That often meant making the PPE last longer than it was originally intended. A popular method for sanitizing PPE for additional use has been UV-C Sterilization.

A small group of Engineers that included myself and another engineer in my lab in collaboration with contacts at the Center for Devices and Radiological Health, began studying these UV-C sterilizing products. We began developing test protocols, identifying products and eventually testing. One of the goals was to evaluate the effectiveness of these products. We have been measuring the output of these lamps compared with exposure times listed in the user instructions and calculating if these devices actually deliver a strong enough dose of UV-C to actually kill similar viruses according to literature. We also evaluate the potential hazard of using a UV-C lamp. The study is still ongoing, but we have already had some significant findings. We have discovered lamps labeled as UV-C germicidal that did not produce any UV light, and thus would not provide any sterilization.

3. What was your understanding of your role before deployment? Was that your role during your deployment?

I was a safety officer, but I'm choosing to highlight COVID-19 work related to my duty station.

4. What would you consider your major accomplishment?

We have uncovered fraudulent misbranded products. Anyone using these products would be falsely under the impression that they had sterilized their PPE or whatever else they were trying to sterilize. The user would then be at more risk to exposure after re-using PPE that was not actually sterilized.



5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Actually, acquiring some of these products was a challenge. With the PPE shortage, people were desperate and there became a spike in demand for UV-C products. Additionally, shutdowns posed a challenge in acquiring these products.

Some companies that sell these products were not set up for online ordering and the phone numbers listed went to unmanned phones. We really had to be persistent.

6. What are some of your best memories from the experience?

Just seeing the whole thing come together. It was really rewarding to work towards solutions during a time when most people were staying home.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

My advice is that you don't have to deploy to make an impact. Many of our Engineers are stationed in places where they can make a significant impact. It might require some out of the box thinking, but it can be done. Don't wait around for your chance to make an impact.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

N/A



CDR Sadaf Toor, MS, Food and Drug Administration

Name of Deployment for 2020 Name of Deployment: Operation Gotham 2020. I was deployed from April 7 – May 10, 2020.

Deployment Team: USPHS New York Strike Team 1. I am Tier 3, Roster D. I was deployed to supplement RDF3.

1. What is your current assignment in USPHS?

Biomedical Engineer in FDA's Center for Devices and Radiological Health, Office of Product Evaluation and Quality, Office of Cardiovascular Devices.

2. What was the mission of your deployment or focus of your COVID-19-related activities?

At the request of New York state, the U.S. Department of Health and Human Services deployed a team of USPHS officers to help augment clinical staff at a 2,500-bed emergency medical facility at the Javits Convention Center. The U.S. Public Health Service Commissioned Corps and U.S. Army operated a joint mission to provide care to COVID-19 patients. A total of 67 USPHS officers served at Javits Center, and a total of 1095 patients were treated there.

3. What was your role?

I was a member of the USPHS Logistics team. I worked in the Javits Center supply warehouse where I was responsible for all of the personal protective equipment (PPE) and oxygen cylinders supply. Our team reported twice daily inventory counts, sorted and inventoried incoming deliveries (including items ordered as well as donations received), fulfilled PPE and oxygen requests for Javits Center (patient floors and common areas) as well as for Army teams deploying to other sites in the region.

4. What would you consider your major accomplishment?

Organizing the PPE supply, writing an SOP, and developing excel worksheets for PPE and oxygen cylinder tracking that streamlined processes and eliminated the need for frequent tedious manual counting, once a reliable baseline count was established.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

Initially, there seemed to be a lack of awareness of USPHS from other armed forces service members. However, being a joint mission, it was a great opportunity to learn about other services and also to provide outreach on USPHS! The quarantine period can be mentally challenging, maybe even more so than the actual mission. After busy, stressful, and adrenaline packed days, suddenly you have too much time on your hands in quarantine. It's important to get some well-deserved rest, then make sure you have things to do to keep yourself busy.



Also, it's important to remember to check-in with yourself and your fellow teammates often to make sure you're keep your mental health on track - get outside for walks, fresh air, and sun if you can.

6. What are some of your best memories from the experience?

Meeting and serving with fellow Public Health Service officers from across the U.S. and meeting and serving alongside other active duty armed forces service members, reservists, and National Guard.

We received a NYPD escort when our buses departed New York City for quarantine in Maryland. I remember seeing a soldier in front of Javits Center proudly waving his cover to express thanks as our caravan drove by.

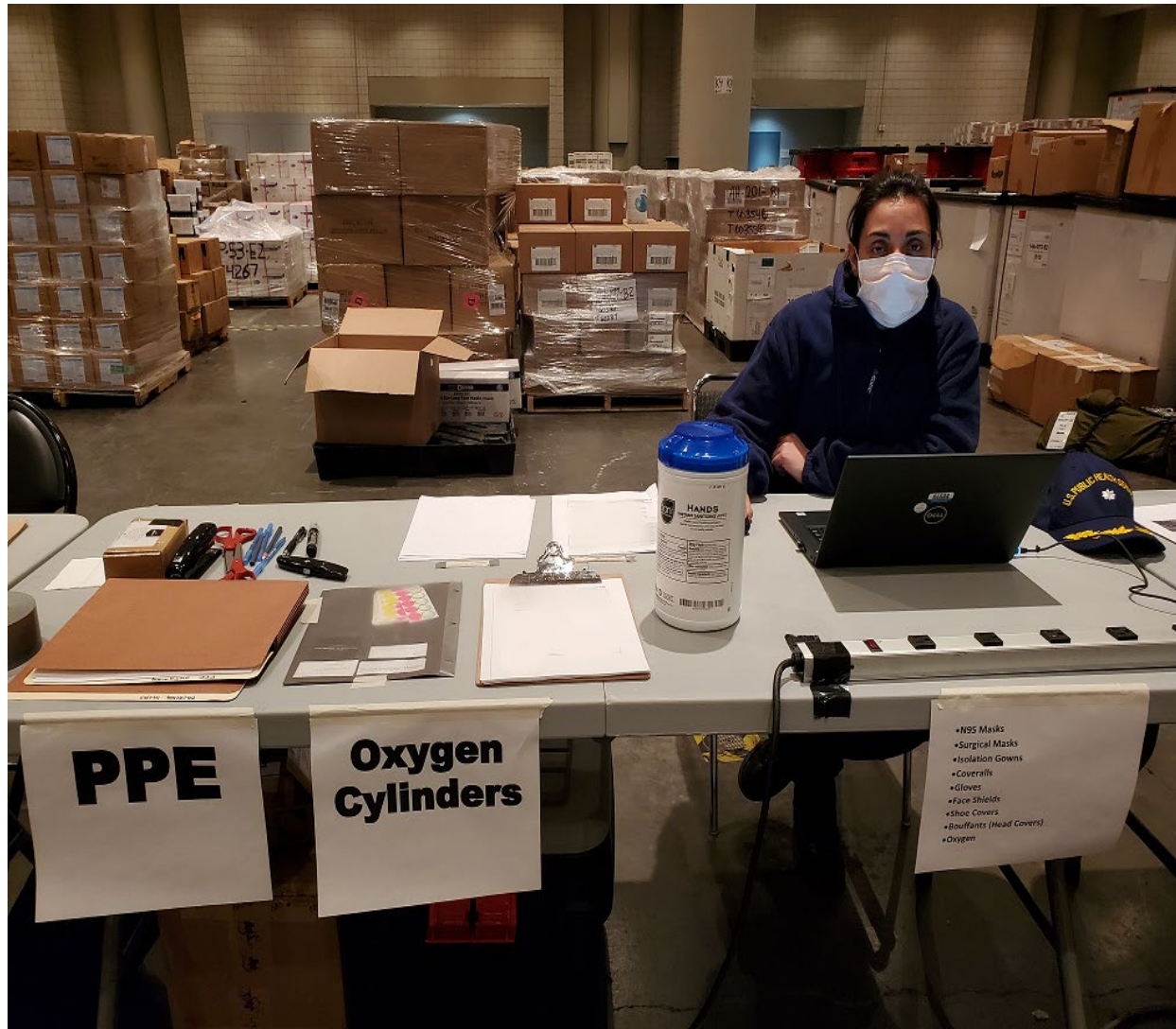
7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic? Be flexible as the mission is always changing. Be patient with RDB as they are dealing with A LOT of deployments during this time. At the same time, don't be afraid to ask important questions if you do not have all the information you need. Have your ODUs ready and be mostly packed and ready to go if called, since you might not have as much prep time as you're used to.

8. If applicable, how was your post deployment/reintegration experience?

Was it a smooth transition back to your daily activities? My transition was smooth. I found that most folks at my duty station (civilian and USPHS, colleagues and supervisors) were very supportive of my time away and expressed their gratitude for my service.

9. Please feel free to share anything else regarding your deployment or COVID-related activities to highlight your experiences or to increase the readiness of fellow officers.

This was my first non-local deployment and it was a bit daunting, but I was also excited and proud to serve in this capacity. Remember that this is what we all signed up for when we joined the USPHS Commissioned Corps. Whatever your role is, do it well and serve proudly - remember that every role plays a part in contributing to the success of the whole mission. Always take appropriate safety precautions (wear your mask and wash your hands thoroughly!) and follow the guidance from the Safety Officers on your deployment team – they are there to protect you and everyone on the team.



CDR Toor manning the PPE and Oxygen station in the warehouse (PC: CDR Sadaf Toor)



Javits Center Lobby (PC: CDR Sadaf Toor)



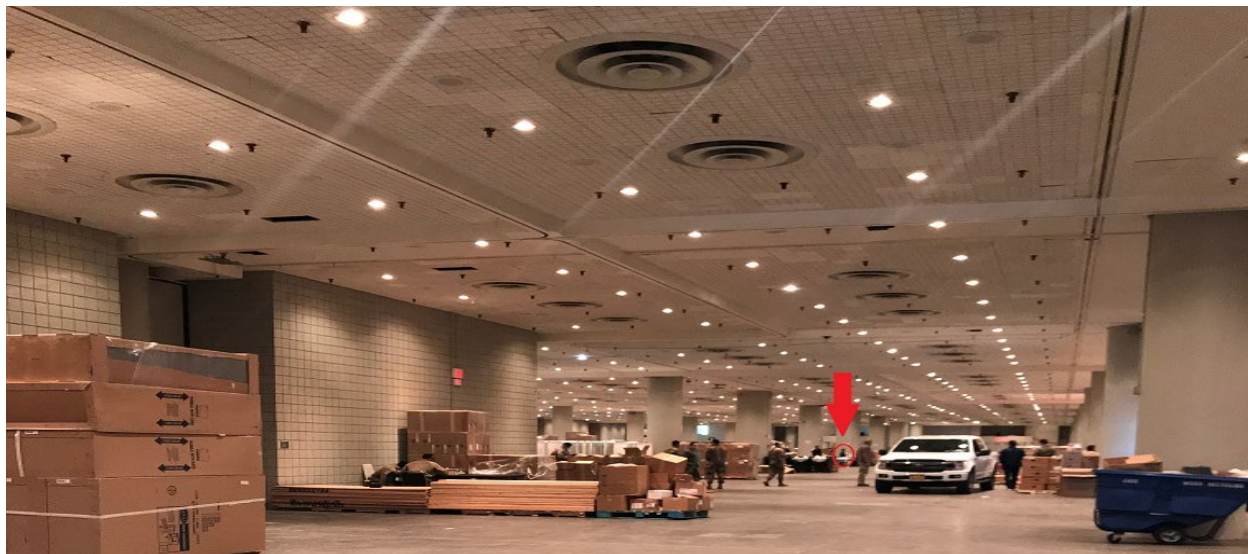
USPHS Logistics Team (missing from this photo: CDR Richard Brantley, who was a night shift officer)
(PC: LCDR Kimberly Goodwin)



Logistics day shift officers hard at work in the warehouse (PC: CAPT Morrissa Rice)



Partial view from the front of the warehouse. CDR Toor in the background working in the PPE and Oxygen section of the warehouse. (PC: screenshot taken from a public video on the dvidshub.net website)



View from the loading dock (i.e., back) of the warehouse. CDR Toor seen manning the PPE and Oxygen section of the warehouse. (PC: CAPT Morrissa Rice)



View from the PPE and Oxygen section of the warehouse towards the back (i.e., loading dock) side (PC: CAPT Morrissa Rice)



LT Kayla DeVault Wendt, E.I., Indian Health Service (IHS)

1. What is your current assignment in USPHS?

Engineer in Facilities at Billings Area Office

2. What was the mission of your deployment or focus of your COVID-19-related activities?

My team has been coordinating with tribal leadership and hospitals to acquire needed PPE and other supplies, oversee the completion of MOUs, help determine needs and supplies for surge planning, and all while continuing with any design projects, construction, and other non-pandemic work that we can possibly (and safely) continue with restrictions in place.

3. What was your role?

I have been working directly with fellow officers to procure items, take meeting minutes during surge planning calls, and to develop documents with hotel information in the event of patient overflow. I have also acquired new projects from one of the tribal nation's hospitals as one of their engineers is transferring out of state.

4. What would you consider your major accomplishment?

I wouldn't say I personally feel extremely accomplished because trying to procure hospital PPE that is already in high demand is often a losing battle. I did, however, feel a sense of accomplishment in the times I *have* been able to secure items our hospitals really needed and also in the times I have located important documentation regarding the scamming likeliness of new vendors we have encountered. Outside of that – and really why I wanted to write a narrative – is I've felt most accomplished knowing I'm part of a very dedicated and hardworking team. All of my team has seniority over me and, despite the frustration of surge planning, the number of us teleworking, and all of the focus energy it takes, they maintain a sense of humor and either stay energized or at least never let on to becoming jaded by the work. With their dedication, our region's IHS hospitals will be as aptly prepared for a surge or second wave as we could possibly be.

5. What were some of the challenges that you faced or experienced during your deployment or COVID-related activities?

My biggest challenge has been the fact that I only commissioned in the January class (OBC 115 – Together we thrive!). I was in my office in February, largely doing trainings and only getting one site visit before I took leave in March for my 1-year wedding anniversary. The timing was excellent for onboarding but terrible for taking leave as my travel had me self-quarantined, but the team was already teleworking. Additionally, I can find it hard to believe I'm doing enough given the gravity – or potential gravity – of the situation and capacity I might have to serve vulnerable populations within our region.



6. What are some of your best memories from the experience?

My best memories are when things actually work out the way we hoped, like even when that email comes in from someone on the team confirming something we had ordered got delivered. But it's also the memes I get from some of my coworkers. In an odd way, I've not been around them in person for some time but I've been able to speak to many of them on a personal level and I feel worlds better and *closer* to them, despite the physical distance.

7. Do you have any advice to share with fellow engineer officers that are responding to address the pandemic?

I realize we may all be in different circumstances, so my advice would especially apply to those of us teleworking from home or in a similar situation as myself. My advice would be to constantly remember that, even if we aren't seeing people from day to day and seeing their faces, they are still there and we are still someone they're counting on. We can't always succeed in times like this one and the challenges it poses, so we have to take a step back and realize what we are doing still matters vitally. Without engineers, what would be of the safety in our facilities? Of backup generators for the people who rely on life support or ventilators? Of living quarters maintained and inspected so our hospitals can be staffed in rural areas? There are many examples. But, as with any employee regardless of category, we also have to find personal separation and emotional regulation. For some, that could be smudging or praying; for others, it might be going for a run, doing a yoga practice, simply sipping coffee before work hours, or starting with the latest book you've been reading. It can be hard to work scheduled chunks of hours when we know, in reality, that the need is 24/7 and doesn't take time off.

8. If applicable, how was your post deployment/reintegration experience? Was it a smooth transition back to your daily activities?

We are still teleworking, but I am starting to do more project design work. The challenge is the need to see my project sites and meet with people at a time when it may not really be safe to do so.



END